FUJITSU

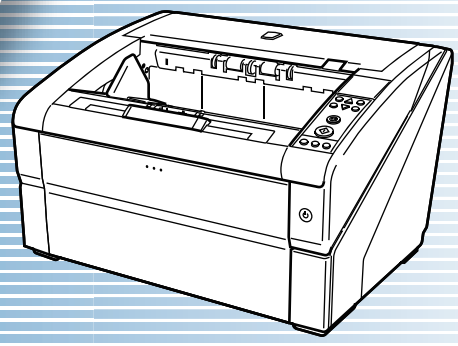
P3PC-2492-03ENZ0

fi-6800

Image Scanner

Operator's Guide

Thank you for purchasing the fi-6800 Color Image Scanner.
This manual explains about the basic operations and handling of this product.
For information on scanner installation, connection, and uninstalling the software, refer to the "Getting Started" guide.



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How to Use This Manual

How to Use This Manual

The following shows the tips for using this manual.

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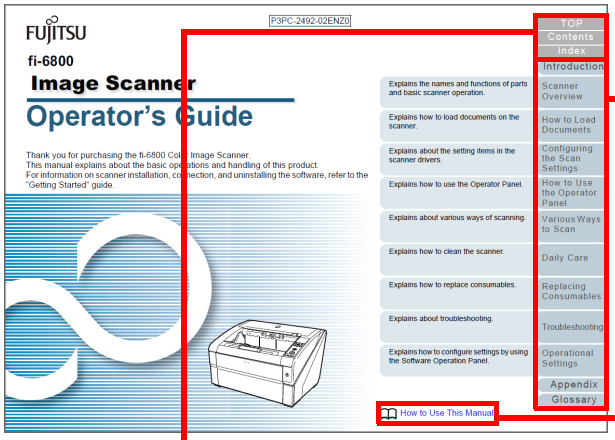

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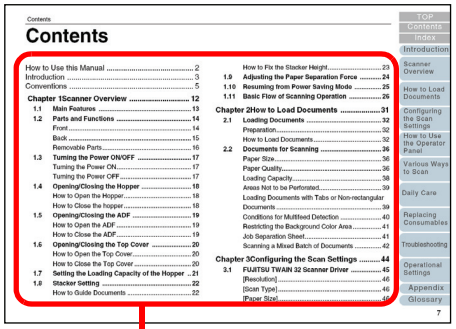

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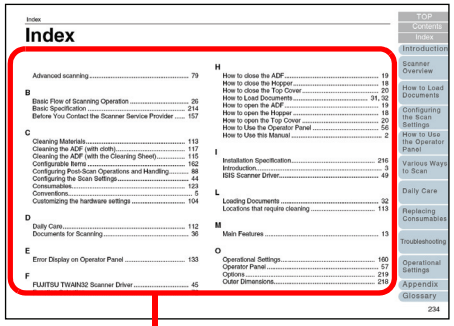

Click an index title to jump to the page.

Common Notes:

- To display or print this manual, either Adobe® Acrobat® (7.0 or later) or Adobe® Reader® (7.0 or later) is required.
- Clicking a blue character string (where your mouse pointer changes to the shape of a hand pointing upward (such as) when you hover over the string) moves to the linked section.
- In this manual, you can use the navigation option of Adobe® Acrobat® or Adobe® Reader®.
  For details, refer to the Adobe® Acrobat® or Adobe® Reader® Help.
- Use the [PageUp] key to return to the previous page, and the [PageDown] key to go to the next page.

Introduction

Thank you for purchasing the fi-6800 Color Image Scanner. This document describes the basic operation methods to perform scanning by using ScandAll PRO. The version of ScandAll PRO bundled with this product is subject to change without notice, in which case the screenshots captured in this document may differ from the actual displayed image.
For more information about ScandAll PRO, refer to the separate [ScandAll PRO V2.0 User's Guide].

About This Product

The fi-6800 is equipped with an Automatic Document Feeder (ADF) for automatic document feeding and duplex (double-sided) scanning.
The scanner also comes with a Color Graphics Accelerator (CGA) board as a standard feature which enables advanced image processing at a high speed when used with Kofax VRS Professional (hereinafter referred to as “Kofax VRS”).

Manuals

The following manuals are included for this product. Read them as needed.

Manual	Description
Safety Precautions (paper)	This manual contains important information about the safe use of this product. Make sure to read this manual before using fi-6800.
Getting Started (paper, PDF)	Outlines the procedures from installation to operation of the scanner. The PDF version is included in the Setup DVD-ROM.
Operator’s Guide (this manual)(PDF)	Provides detailed information on how to operate and maintain the scanner daily, how to replace the consumables, and how to troubleshoot problems. Included in the Setup DVD-ROM.
ScandAll PRO V2.0 User's Guide (PDF)	Provides information on how to scan documents by using ScandAll PRO. Included in the Setup DVD-ROM.
fi-680PRF/PRB Imprinter Operator’s Guide (paper)	Provides detailed information on how to operate and maintain the fi-680PRF/PRB daily, how to replace the consumables, and how to troubleshoot problems. fi-680PRF/PRB imprinters are options for the fi-6800 scanner.
TWAIN User's Guide (PDF)	Explains how to install and operate the TWAIN scanner driver. Included in the Setup DVD-ROM.
Image Processing Software Option User’s Guide (PDF)	Explains how to install and operate the Image Processing Software Option. Included in the Setup DVD-ROM.
Read Before Using VRS (PDF)	Explains how to connect and install Kofax VRS. Included in the Setup DVD-ROM.

Manual	Description
Scanner Central Admin 4.0 User's Guide (PDF)	Explains about the overview, installation, operation and maintenance of Scanner Central Admin. Included in the Setup DVD-ROM.
Error Recovery Guide (HTML Help)	Details the status of the scanner and explains how to resolve problems encountered. Contains movies that explain how to clean and replace the consumables. Included in the Setup DVD-ROM.
Help - Embedded in the scanner drivers	Explains how to use the scanner drivers, and how to configure the scanner settings. Can be referenced from each scanner driver.
Help - Embedded in related applications	Explains how to use and configure the settings for the application software. Use help files as necessary. Can be referenced from the applications.

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Conventions

Safety Information

This manual describes important details for users to use this product safely and correctly. Read this manual thoroughly before you start using this product.

Symbols Used in This Manual

For notational convention, the following symbols are used in this manual:

This symbol alerts particularly important information. Be sure to read this information.

This symbol alerts operators to helpful advice regarding operations.

Naming Conventions in This Manual

The operating systems and products in this manual are indicated as follows:

Product	Indication	
Microsoft® Windows® 2000 Professional	Windows 2000	Windows (*1)
Microsoft® Windows® XP Professional, Microsoft® Windows® XP Professional x64 Edition, Microsoft® Windows® XP Home Edition	Windows XP	
Microsoft® Windows Server® 2003 Standard Edition, Microsoft® Windows Server® 2003 Standard ×64 Edition, Microsoft® Windows Server® 2003 R2 Standard Edition, Microsoft® Windows Server® 2003 R2 Standard ×64 Edition	Windows Server 2003	
Microsoft® Windows Vista® Home Basic (32/64-bit), Microsoft® Windows Vista® Home Premium (32/64-bit), Microsoft® Windows Vista® Business (32/64-bit), Microsoft® Windows Vista® Enterprise (32/64-bit), Microsoft® Windows Vista® Ultimate (32/64-bit)	Windows Vista	

Product	Indication	
Microsoft® Windows Server® 2008 Standard (32/64-bit), Microsoft® Windows Server® 2008 R2 Standard (64-bit)	Windows Server 2008	Windows (*1)
Windows® 7 Home Premium (32/64-bit), Windows® 7 Professional (32/64-bit), Windows® 7 Enterprise (32/64-bit), Windows® 7 Ultimate (32/64-bit)	Windows 7	
Microsoft® Office SharePoint® Portal Server 2003	SharePoint Server	
Microsoft® Office SharePoint® Server 2007		
Microsoft® SharePoint® Server 2010		
Adobe® Acrobat®	Adobe Acrobat (*2)	

*1: Where there is no distinction between the different versions of the above operating system, the general term "Windows" is used.

*2: All the descriptions in this manual assume the usage of Adobe Acrobat bundled with this product. However, Adobe Acrobat may be upgraded without notice. If the descriptions differ from the actual displayed screens, refer to the Adobe Acrobat Help.

Arrow Symbols in This Manual

Right-arrow symbols (→) are used to separate icons or menu options you should select in succession.
Example: Click [Scan] menu → [Scan Setting].

Screen Examples in This Manual

The screen examples in this manual are subject to change without notice in the interest of product improvement.
If the actual displayed screen differs from the screen examples in this manual, operate by following the actual displayed screen while referring to the user's manual of the scanner application that you are using.
The screen examples used in this manual are of TWAIN scanner driver, ISIS scanner driver, ScandAll PRO (an image acquisition software), and Adobe Acrobat.
This manual uses screenshots from Windows Vista.
The windows that appear and the operations differ by the operating system that you are using. Also note that with some scanner models, the screens and operations may differ from this manual when you update the TWAIN scanner driver or ISIS scanner driver. In that case, refer to the manual provided upon updating the driver.

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Chapter 1 Scanner Overview

This chapter explains about the names and functions of the scanner components, as well as the methods for basic operations.

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1.1 Main Features

This section explains about the main features of this product.
The scanner is equipped with the following features:

Realizes a scanning speed of 130 sheets/260 pages per minute (under JPEG compression)

With a newly-developed high-speed CCD and a high-speed image processing circuit, the scanner can achieve a scanning speed of up to 130 sheets/260 pages per minute with A4/Letter color documents. This allows you to scan up to approximately 60,000 sheets per day.

Mounts a Liquid Crystal Display (LCD)

The scanner mounts an LCD that displays various operational settings for scanning, number of pages scanned, and error status. This allows you to easily check the status of the scanner.

Improved efficiency for pre- and post-scan work

The scanner supports "batch scanning" which allows you to scan documents with different paper thickness/size/color/brightness at once, simplifying the process of sorting the documents before scanning. Also, the new "Elevator Stacker" has been adopted which automatically keeps the stacker at a certain height. This prevents the scanned documents from being scattered in the output, which makes the scan operation more efficient.

Reduced work loss caused by multifeeds

The scanner mounts an ultrasonic multifeed sensor that accurately detects errors when two or more sheets are fed through the scanner at once (called "multifeed"). This multifeed detection is reliable even when scanning a mixed batch of documents with different thickness/size/color/brightness, avoiding potential work loss.

Intelligent Multifeed function

When there is paper of the same size attached to a designated location on the page, the Intelligent Multifeed function recognizes the location of the attachment. This allows you to continue scanning instead of detecting every paper attached to that location as multifeed.

Furthermore, functions such as Paper Protection will save valuable documents from being damaged.

Various functions to help the operators

“Anti-Dust Coating Glass built-in Paper Path” keeps the surface of the scan glass clean, reducing the operators’ work load by extending the cleaning cycles.
“Automatic Stacker” is adopted which stacks the scanned documents neatly, reducing the operators’ work load by shortening the time to prepare and sort the documents.
“Automatic Image Quality Checker” checks through the scanned images and displays images that are in poor condition.

Advanced image processing functions

The scanner’s automatic detection function outputs images in color or monochrome by document content. You do not have to change the settings every time you scan. Also, it comes with a Kofax CGA board which is known for quality image processing. High quality images can be acquired by using functions such as Automatic Image Rotation which rotates documents into their correct orientations, as well as other various image processing functions such as Background Removal.

Front-Side/Back-Side Imprinter Option

Front-Side/Back-Side Imprinters are available as scanner options, which are often demanded for managing/verifying vouchers and business forms. You can select Front-Side Imprinter (to print on the front side of the document) or Back-Side Imprinter (to print on the back side of the document) for improved usability.

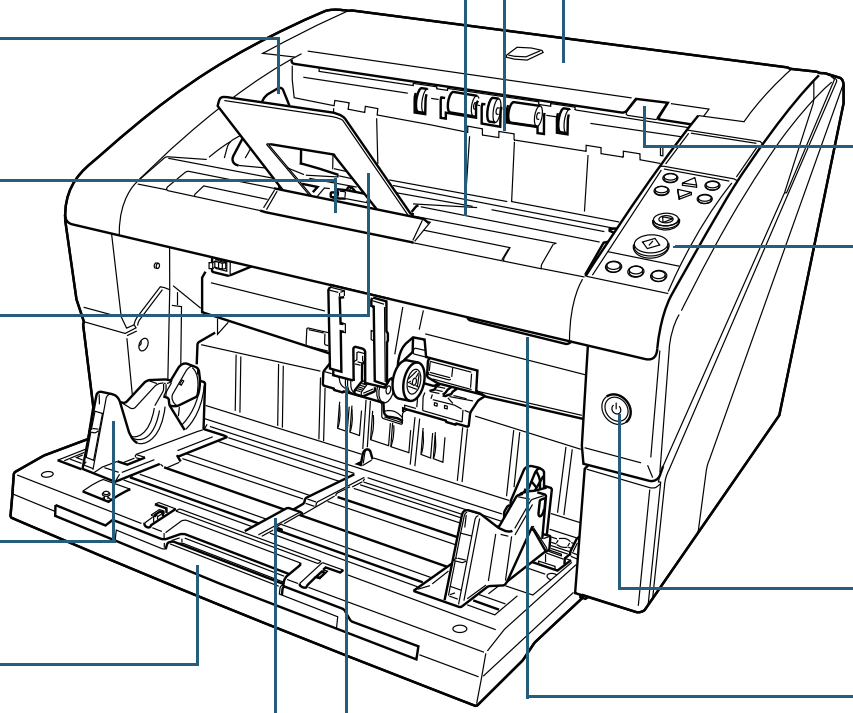
Centralized management of multiple scanners

The bundled "Scanner Central Admin Agent" application allows you to manage multiple scanners together, for example, to update the scanner settings and drivers, as well as to monitor the operating status of each scanner.

1.2 Parts and Functions

This section shows the names of the scanner parts.

Front



Stacker
Stacks up the ejected documents. It can be kept at an optimum height to straighten the documents.

Stacker Side Guide
Aligns the documents in width direction as they are ejected onto the stacker.

Stacker Extension
Pull out and adjust to the length of the documents.

Paper Stop
Guides the ejected documents in length direction to prevent them from being scattered. Though documents can be aligned without the paper stop, use it to stack them more neatly.

Hopper Side Guide
Guides the documents in width direction as they are fed into the scanner.

Hopper Extension
Pull out to place long documents on the hopper.

Hopper
A table for loading documents to scan.

Paper Output
Ejects the scanned documents.

Top Cover
A cover for the upper paper path. Open it to remove jammed documents or clean the inside of the scanner.

Top Cover Release Tab
Lift up to open the top cover.

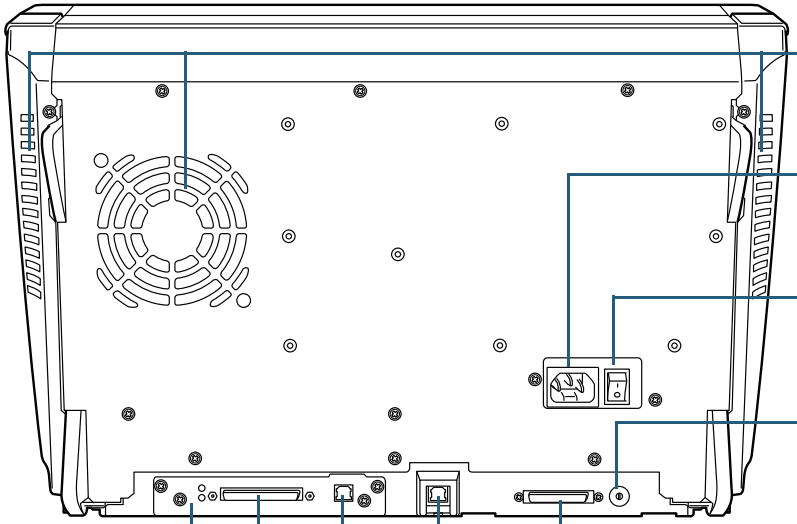
Operator Panel
Consists of LCD, buttons and LED. It can be used to operate the scanner or check its status.
For details about the operator panel, refer to "Chapter 4 How to Use the Operator Panel" (page 60).

Power Button
Press to turn the power ON/OFF.

ADF Release Tab
Lift up to open the ADF.

ADF (Automatic Document Feeder)
Pulls and feeds the documents loaded on the hopper one at a time.
Open it to replace the consumables or clean the inside of the scanner.

Back



Ventilation Port
An outlet for ventilating hot air from inside the scanner.

Power Connector
A connector for the power cable.

Main Power Switch
Powers ON/OFF the scanner.

SCSI ID Switch
Used to configure the SCSI ID (Factory default setting: 5).

SCSI Connector 1
For connecting a SCSI cable.

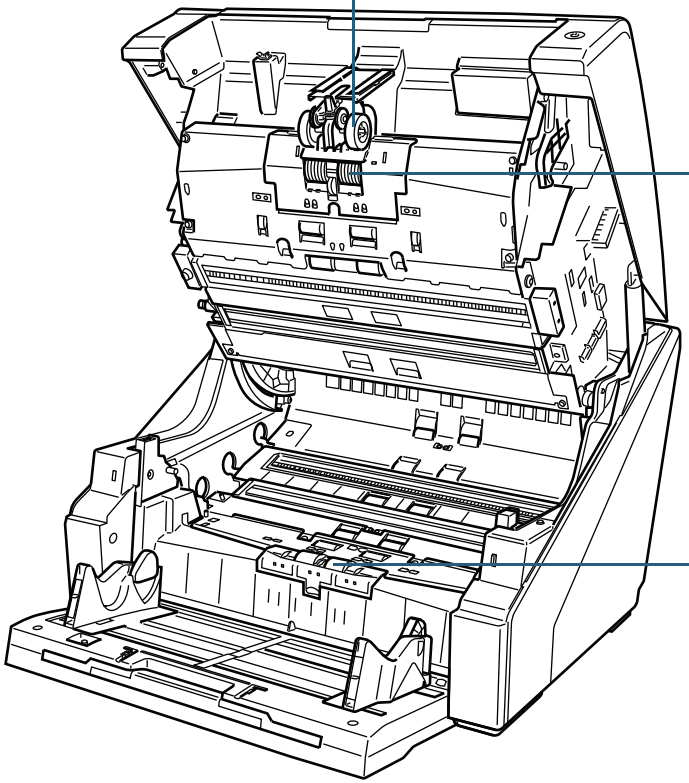
USB Connector 1
For connecting a USB cable.

USB Connector 2
For connecting a USB cable.
A USB connector for using Kofax VRS.

SCSI Connector 2
For connecting a SCSI cable.
A SCSI connector for using Kofax VRS.

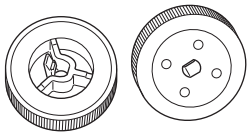
CGA Board
A CGA board for Kofax VRS.

Removable Parts



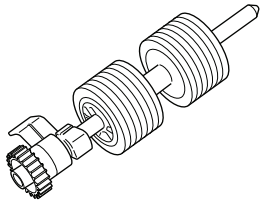
Pick Roller

For information on how to remove the pick roller, refer to "7.2 Replacing the Pick Roller" (page 135).



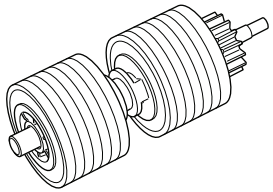
Separator Roller

For information on how to remove the separator roller, refer to "7.3 Replacing the Separator Roller" (page 137).



Brake Roller

For information on how to remove the brake roller, refer to "7.4 Replacing the Brake Roller" (page 140).



1.3 Turning the Power ON/OFF

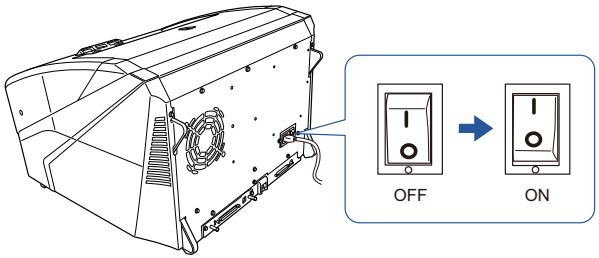
This section explains how to power on/off the scanner.

Turning the Power ON

Turn on the power in the following procedure:

> When connected via SCSI, turn on the scanner and confirm that [Ready] is displayed on the LCD before you turn on the computer.

1 Press the "|" side of the main power switch on the back.

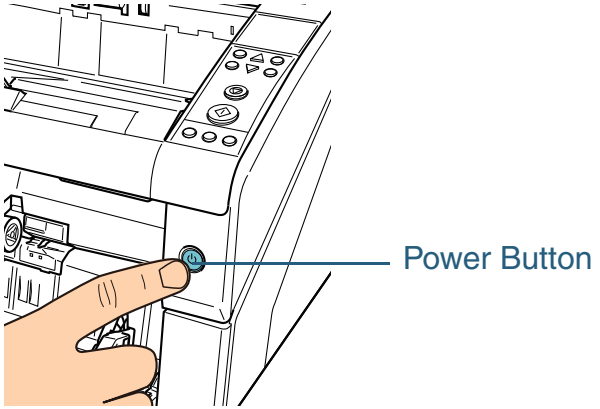


2 Open the hopper.

For information on how to open the hopper, refer to "1.4 Opening/Closing the Hopper" (page 19).

> Make sure to open the hopper before you press the power button to turn on the scanner.

3 Press the power button on the front of the scanner.



⇨ The power is turned on, and the power button lights in blue.
Note that the following screen is displayed on the operator panel LCD during initialization.

When [Ready] is displayed on the LCD, the scanner is ready to start scanning.

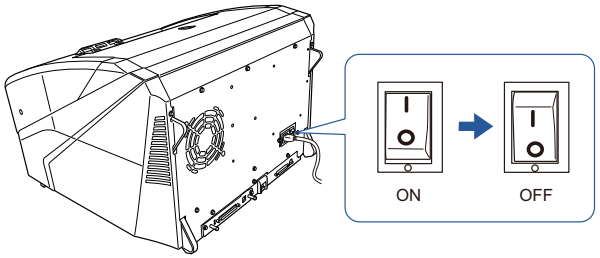
Turning the Power OFF

Turn off the power in the following procedure:

1 Press the power button on the front for more than two seconds.

⇨ The power is turned off, and the power button switches off.

If the scanner will not be used for a long time, press the "O" side of the main power switch to turn off the power, then unplug the power cable.



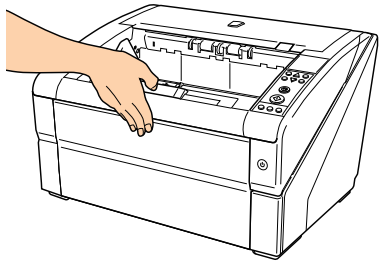
1.4 Opening/Closing the Hopper

This section describes how to open and close the hopper.

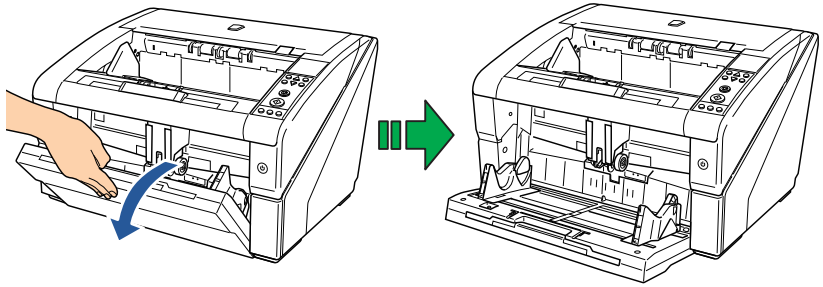
How to Open the Hopper

Open the hopper in the following procedure:

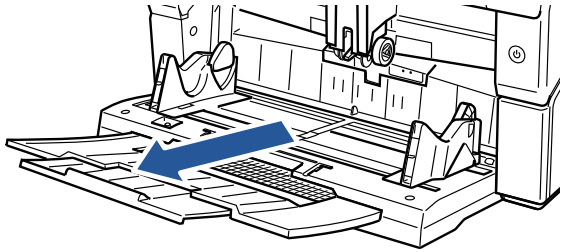
1 Push the upper middle section of the hopper.



2 Bring down the hopper as you support it with your hand.



3 Adjust the hopper extension to the length of the document.

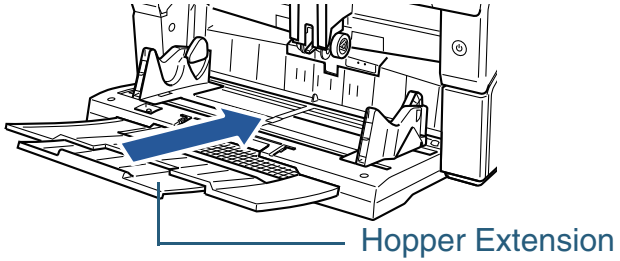


How to Close the Hopper

Close the hopper in the following procedure:

1 Remove all documents from the hopper.

2 Slide in the hopper extension.



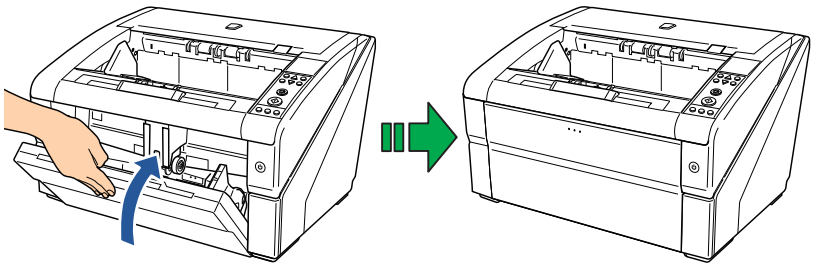
3 If the hopper level has been adjusted, set the hopper back to the lower position.

Lower the hopper level from the operator panel on the scanner.

For details on how to adjust the hopper level, refer to "1.7 Setting the Loading Capacity of the Hopper" (page 23).

4 Close the hopper.

Make sure to push the hopper until it locks.



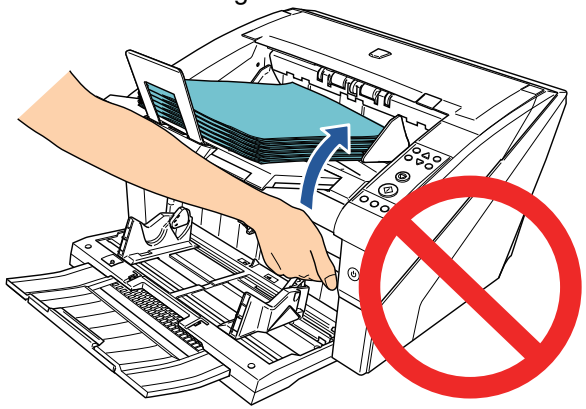
1.5 Opening/Closing the ADF

This section describes how to open and close the ADF.

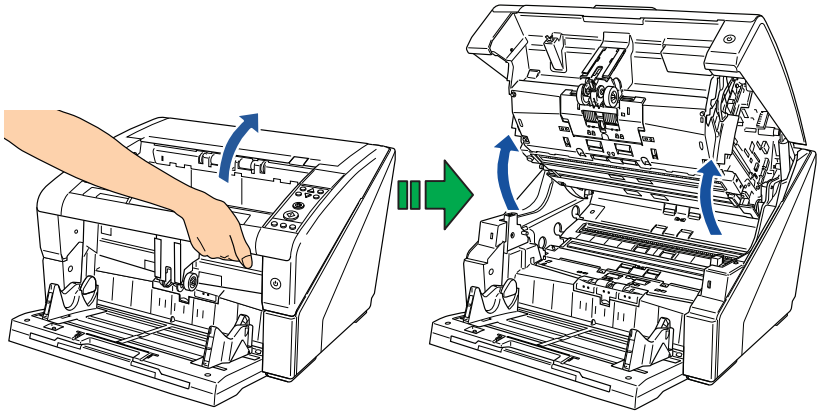
How to Open the ADF

Open the ADF in the following procedure:

1 Remove all documents from the stacker.

CAUTION	Do not open the ADF when there is a large volume of documents left on the stacker. You may have your fingers caught if the ADF closes from the weight of the documents. 

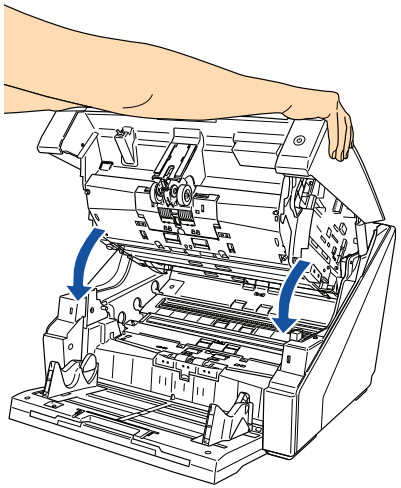
2 Grab the ADF release tab and lift it up to open the ADF.



How to Close the ADF

Close the ADF in the following manner:

1 Hold the ADF with both hands and push it down slowly.
Push the ADF until it locks.



- Make sure that there is no foreign matter caught inside the ADF.
- Be careful not to have your fingers caught.

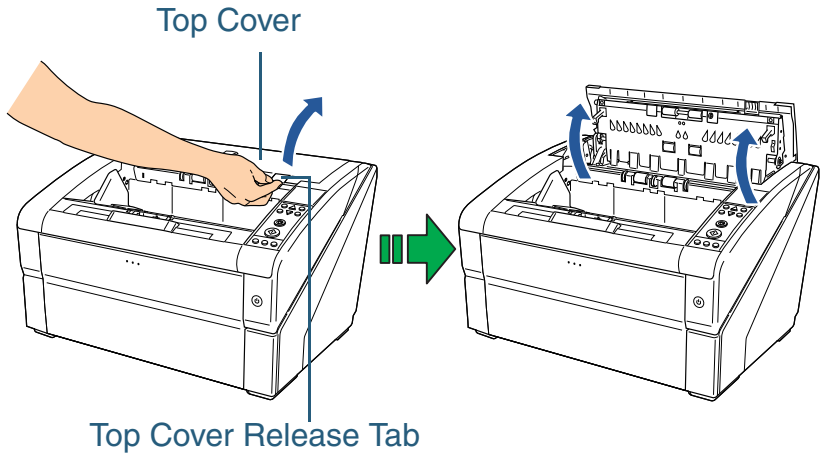
1.6 Opening/Closing the Top Cover

This section describes how to open and close the top cover.

How to Open the Top Cover

Open the top cover in the following manner:

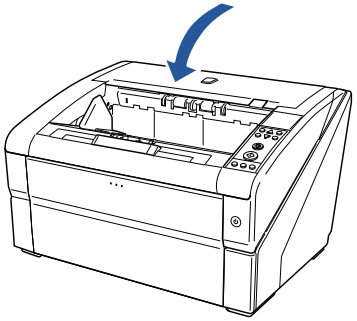
1 Hold onto the top cover release tab and push it up to open the top cover.



How to Close the Top Cover

Close the top cover in the following manner:

1 Close the top cover and push it down gently until it locks.



- Make sure that there is no foreign matter caught inside the top cover.
- Be careful not to have your fingers caught.

1.7 Setting the Loading Capacity of the Hopper

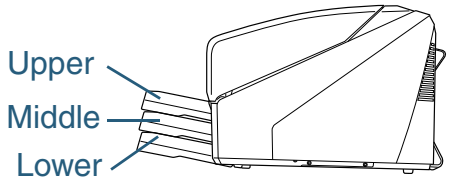
If there are only a few documents, you can set the hopper to a higher position and shorten the time to get to the feeding position.

- To avoid the risk of jamming your fingers, do not touch the hopper while it is moving up/down.
- Do not place anything on top of the hopper while it is moving. The scanner may be damaged if any object is caught inside.
- To avoid any contact that may damage the scanner, do not place anything beneath the hopper.
- Do not adjust the hopper height from the operator panel when the hopper is closed, as it may damage the hopper.

This function is only available when [Ready] is displayed on the operator panel LCD.

The hopper level can be set for three different capacities.

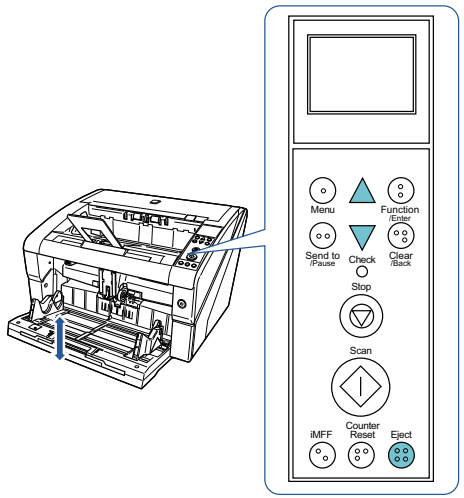
Upper:	A maximum of 100 sheets (*1) can be loaded.
Middle:	A maximum of 300 sheets (*1) can be loaded.
Lower:	A maximum of 500 sheets (*1) can be loaded.



*1: For documents with a paper weight of 80 g/m^2 (20 lb).
The capacity varies depending on the paper weight of the document.
For more details, refer to "2.2 Documents for Scanning" (page 40).

Use the operator panel to adjust the height of the hopper.
Configure by selecting [10: Hopper Level] in the [Main Menu] of the operator panel.
For more details about the settings, refer to "4.2 Main Menu" (page 65).
When the scanner has just been powered on, it is set to the [4: Lower] position.

[Hopper Level] can also be displayed by shortcut key. To display the [Hopper Level] screen by shortcut key, press the [Eject] button and either [△] or [▽] button at the same time when [Ready] is displayed. Change the hopper level by using the [△] or [▽] button in [Hopper Level]. Note that the [Hopper Level] screen is not displayed unless the two buttons are pressed simultaneously.



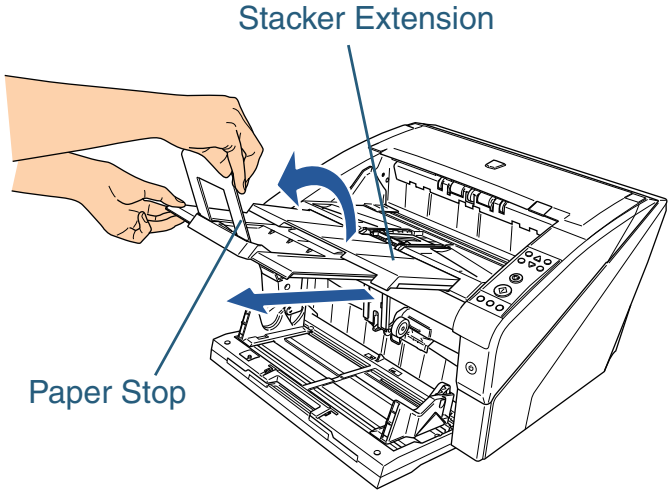
When [Hopper Level] is displayed by shortcut key, the screen returns to [Ready] after a certain period of time. This period of time can be configured in [18: Operation Panel Timeout] of the operator panel.

1.8 Stacker Setting

When you perform a scan, the document loaded on the hopper is ejected onto the stacker.
You can stack the documents neatly by using the stacker extension and the stacker side guides as shown in the procedure below.
You can also fix the stacker at certain heights.

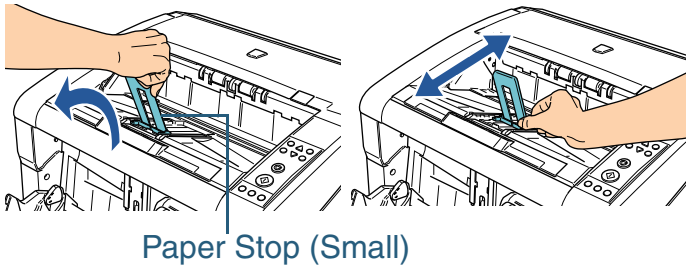
How to Guide Documents

1 Adjust the stacker extension to the length of the document, and pull up the paper stop.



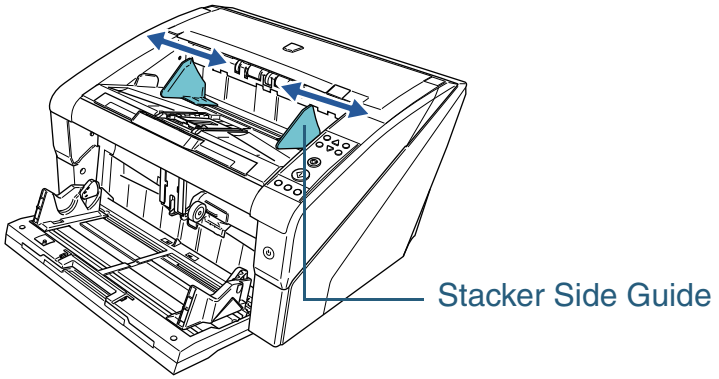
- Do not hold the paper stop when you pull out the stacker extension because it may break.
- Make sure that the position of the paper stop is set longer than the document length.
  You can align the documents neatly by leaving a small gap between the paper stop and the documents.

Use the paper stop (small) when the document length is short. Lift up the paper stop (small) to about 130 degrees from the stacker level.



To scan documents longer than A3 size, pull out the hopper extension and the stacker extension all the way. Also, make sure not to pull up the paper stop.

2 Adjust the stacker side guides to the width of the document.



Make sure to set the distance between the stacker side guides longer than the document width.

How to Fix the Stacker Height

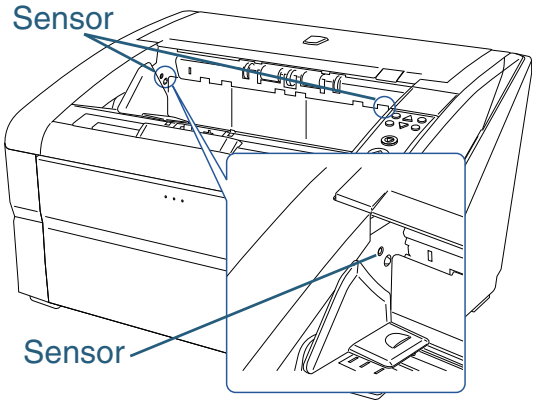
Highly deformed (curled, folded or creased) documents may be scattered in the output when they are ejected onto the stacker. In that case, having the stacker height fixed during scanning may help the documents be stacked neatly.

1 If the scanner driver's setup dialog box is displayed, close the dialog box.

2 In the [Main Menu] of the operator panel, select [2: Fixed] for [9: Stacker Positioning].
For details about the settings, refer to "4.2 Main Menu" (page 65).

⇨ The stacker height is fixed.

- When the scanner has just been powered on, it is set to [1: Movable].
- In the rear ends of the stacker, a sensor is mounted on each side which detects documents. Make sure that nothing is placed in a location (between the two sensors) that may block the sensor.



- The stacker may move just after turning the power on or when the scanning starts. Do not touch or place anything on top.

1.9 Adjusting the Paper Separation Force

When you experience frequent multifeeds, pick errors or paper jams, you can fix the problem by adjusting the force that separates the papers. Keep the default setting for normal use.

Paper separation force can be set in five different levels.

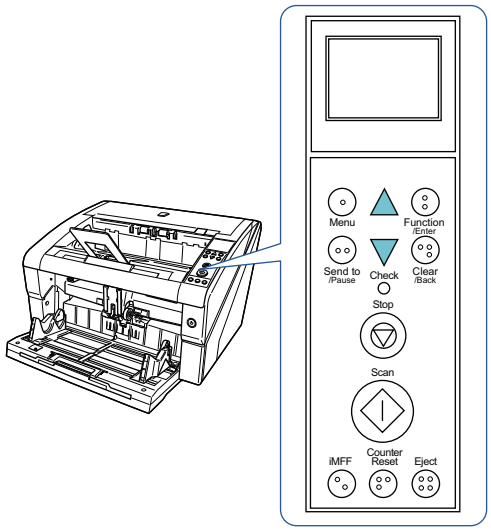
Low High	Force	Paper type	
■□□□□	: Low	Low friction, easy to separate	↑ Prevents pick error and paper jam
■■□□□	: Slightly low		
■■■□□	: Mid (default)		
■■■■□	: Slightly high	High friction, difficult to separate	↓ Prevents multifeed
■■■■■	: High		

- Set the paper separation force lower when pick errors or paper jams occur frequently.
- Set the paper separation force higher if multifeeds occur frequently when the paper separation force is low.
- Errors such as multifeed, pick error and paper jam may also be caused by worn-out consumables or contamination in the feeding mechanism. If these symptoms do not improve after changing the paper separation force, either replace the consumables or clean the inside of the scanner.
- Documents may be damaged if the paper separation force is set too high. In that case, set the paper separation force lower.

Use the operator panel to adjust the paper separation force. [11: Paper Separation Force] can be adjusted in the [Main Menu] of the operator panel.
For more details about the settings, refer to "4.2 Main Menu" (page 65).

The paper separation force is set to [■■■□□] when the power has just been turned on.
However, note that you can also have the paper separation force setting memorized by using the Software Operation Panel. For more details, refer to " Setting the Paper Separation Force upon Turning the Power Off [Retain current paper thickness]" (page 219).

[Paper Separation Force] can also be displayed by shortcut key. To display the [Paper Separation Force] screen by shortcut key, press the [△] or [▽] button when [Ready] is displayed. Change the paper separation force by using the [△] or [▽] button.



When [Paper Separation Force] is displayed by shortcut key, the screen returns to [Ready] after a certain period of time. This period of time can be configured in [18: Operation Panel Timeout] of the operator panel.

1.10 Resuming from Power Saving Mode

Power saving mode saves the power consumption of the scanner while the power is turned on.
If the scanner is left powered on for 15 minutes or more without being used, it automatically enters power saving mode.
When it enters power saving mode, the LCD on the operator panel turns off. The power button remains lit in blue.
To resume from power saving mode, perform one of the following:

- Load a document on the hopper.
- Press any button (except for power button) on the operator panel. Note that the scanner will be turned off when you press the power button for more than two seconds.
- Execute a command from the scanner driver.

The waiting time for entering power saving mode can be changed in the Software Operation Panel.
For more details, refer to "Setting the Waiting Time to Enter Power Saving Mode [Power saving]" (page 218).

1.11 Basic Flow of Scanning Operation

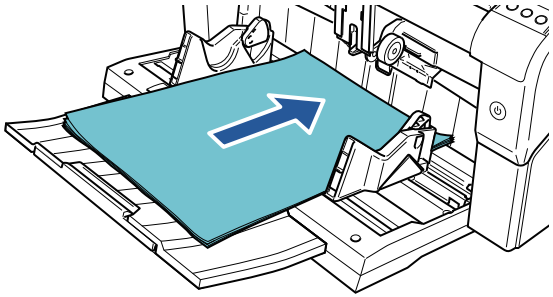
This section explains about the basic flow of scanning operations.
In order to perform a scan, you need a scanner driver and an application that supports the scanner driver.
This product bundles the TWAIN driver and the ISIS driver (compliant to the respective standards), Kofax VRS, and an application called "ScandAll PRO" which supports both drivers and Kofax VRS.

- For details about the scanner drivers, refer to the following:
  - "Chapter 3 Configuring the Scan Settings" (page 48)
  - TWAIN Scanner Driver Help
  - ISIS Scanner Driver Help
- For details about Kofax VRS, refer to:
  - Kofax VRS Help
- For details about ScandAll PRO, refer to the following:
  - ScandAll PRO V2.0 User's Guide
  - ScandAll PRO Help

1 Turn on the scanner.
For information on how to turn on the power, refer to "1.3 Turning the Power ON/OFF" (page 17).

- When connected via SCSI, turn on the scanner and confirm that [Ready] is displayed on the LCD before you turn on the computer.
- When switching the connectors, make sure to power off the scanner and the computer first.

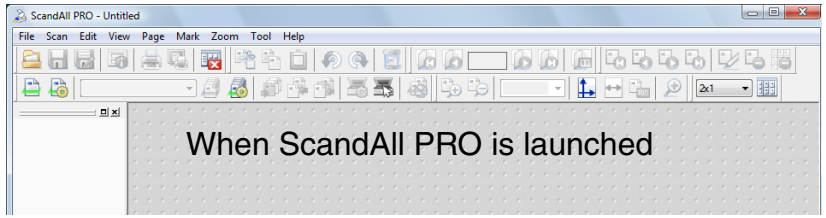
2 Load documents on the hopper.
Set the documents with the front side (scanning side) facing up.



For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

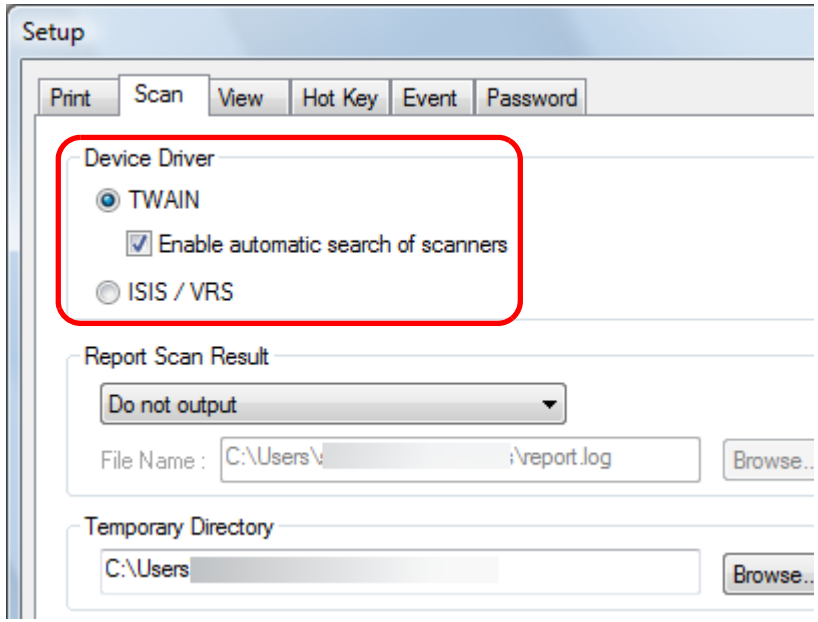
3 Start up the application to use for scanning.

ScandAll PRO will be used here as an example to explain the procedure.

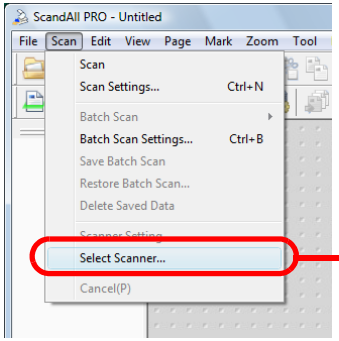


For information on how to launch ScandAll PRO, refer to "ScandAll PRO V2.0 User's Guide".

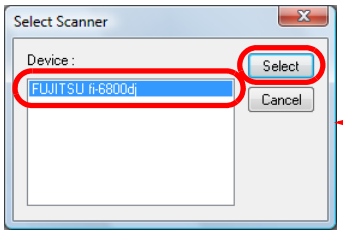
4 Select a scanner driver to use for scanning.



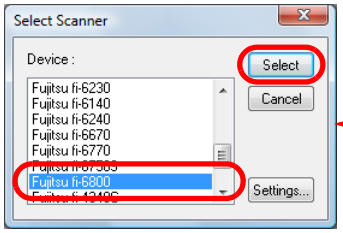
5 Select a scanner.



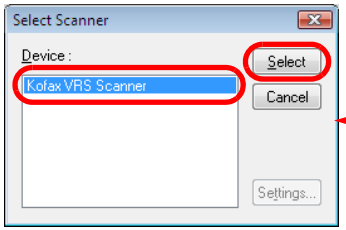
For TWAIN



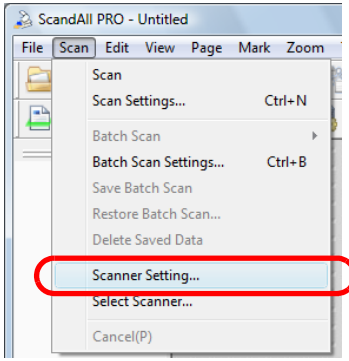
For ISIS



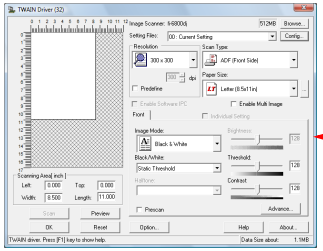
Kofax VRS:



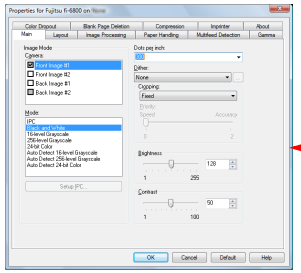
6 Launch a scanner driver from the application.



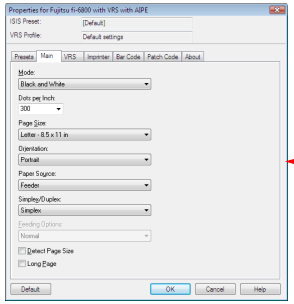
For TWAIN



For ISIS

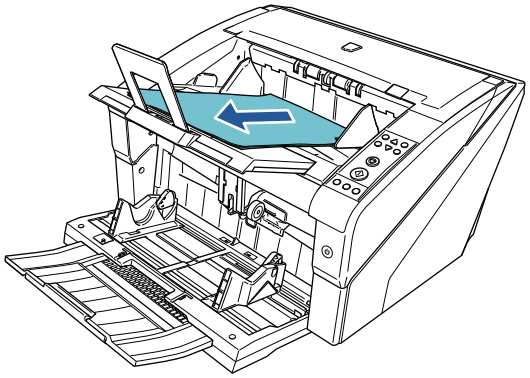


Kofax VRS:



7 In the scanner driver's setup dialog box, configure the scan settings.

8 Perform a scan.



For information on how to scan using ScandAll PRO, refer to "ScandAll PRO V2.0 User's Guide".

9 Save the scanned images in a file.

> Procedures and operations slightly vary depending on the application used.
> For details about how to scan using ScandAll PRO, refer to "ScandAll PRO V2.0 User's Guide".
> To perform scanning with other applications, refer to the manual bundled with the application.

1.12 Image Scanning Application

This section explains about the bundled “ScandAll PRO” image scanning application, which is used as an example to explain the procedures in this manual.

ScandAll PRO supports both TWAIN and ISIS drivers. By defining scan settings as profiles, you can customize the settings according to your preference.

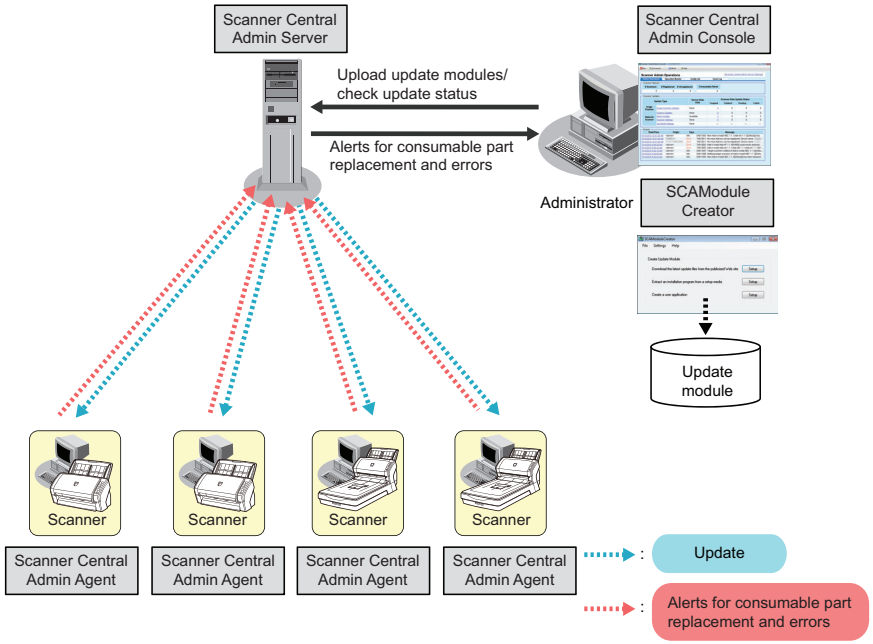
1.13 Centralized Management of Scanners

This section explains about managing a large number of scanners in a unified manner by providing the following capabilities.

- Simultaneously update settings for multiple scanners and their drivers.
  Because there is no need to update each scanner one by one, a significant reduction is achieved in the time required to update a large number of scanners.
- Monitor scanners to check for any consumable parts that require replacement, or the occurrence of errors.
  The alerts for consumable part replacement and errors are provided by scanners, which provides an easy way of checking the operating status of scanners.

To enable the above functions, "Scanner Central Admin" is required which consists of four applications bundled with this product:

- Scanner Central Admin Server
  Install this application in the main computer that is used for the centralized management of scanners.
  By registering scanners on the Scanner Central Admin Server, you can build a system to run a unified management for all scanners.
- Scanner Central Admin Console
  Install this application in a computer to upload update modules and to monitor the operating status of the scanners.
  The administrators can perform these tasks from the Scanner Central Admin Console window, where they can also check the alerts for consumable replacement and errors sent from the scanners.
- Scanner Central Admin Agent
  Install this application in a computer connected to a scanner. It allows scanners to link with the Scanner Central Admin Server.
  Linking with the Scanner Central Admin Server will enable you to apply updates on scanner settings, and the scanner can also send alerts on consumable replacement and errors.
- SCAModule Creator
  Use this application to create update modules to upload onto the Scanner Central Admin Server.
  It is only required for creating update modules.



For more details, refer to the Scanner Central Admin 4.0 User's Guide.

Chapter 2 How to Load Documents

This chapter explains how to load documents on the scanner.

2.1 Loading Documents.....34
2.2 Documents for Scanning 40

2.1 Loading Documents

This section explains how to load documents on the scanner.

Preparation

Prepare the documents as described below.

> For details about the paper size and paper quality required for normal operations, refer to "2.2 Documents for Scanning" (page 40).

1 Check the documents.

1 Check if the documents to be loaded are of the same size or different sizes. Ways to load documents differ depending on whether the documents are the same size or not.

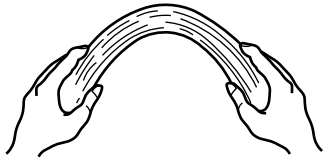
2 Check the number of sheets. Up to 500 sheets can be loaded (with paper weight of 80 g/m^2 [20 lb], thickness of the document stack under 50 mm, and the total weight under 5 kg).

For more details, refer to "Loading Capacity" (page 42).

> - For documents with tabs or non-rectangular documents, refer to "Loading Documents with Tabs or Non-rectangular Documents" (page 43).
> - For documents with different widths, refer to "Scanning a Mixed Batch of Documents" (page 46) and "Scanning Documents of Different Widths" (page 86).

2 Fan the documents.

1 Hold both ends of the documents and bend them.



2 Firmly holding the documents with both hands, bend them back in the opposite direction as follows.

3 Repeat steps 1) and 2) a few times.

4 Rotate the documents by 90 degrees and fan them in the same manner.

5 Align the edges of the documents.

> For information on how to fan documents, refer to the “Error Recovery Guide”.
> The Error Recovery Guide is included in the Setup DVD-ROM. For information on how to install the Error Recovery Guide, refer to "Installing the Scanner Software" in “Getting Started”.

How to Load Documents

There are two ways to load the documents.

Setting the documents at the center of the hopper

This style is used mainly when the documents are of the same size.

Setting the documents by the left or right side of the hopper

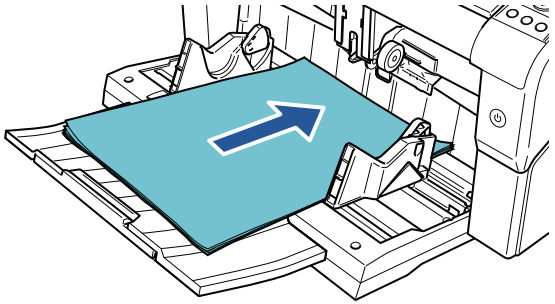
This style is used mainly when the documents are in different sizes or when you want to shift the center of the documents.

Note that different conditions apply for multifeed detection when you set the documents by either left or right side of the hopper.

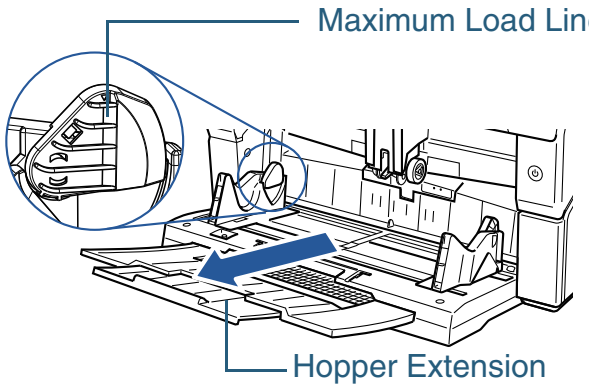
■Setting the documents at the center of the hopper

1 Load documents on the hopper.

Set the documents with the front side (scanning side) facing up.



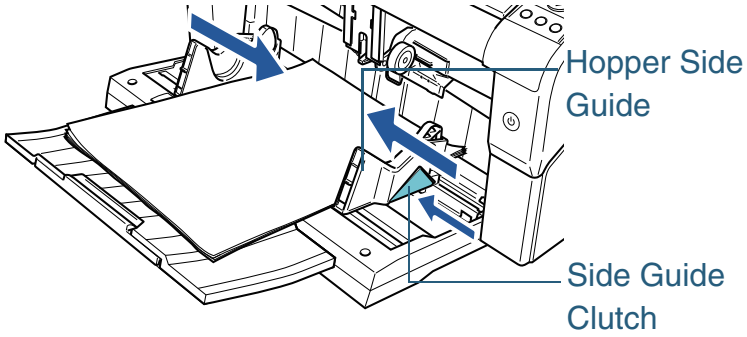
- Make sure to keep the documents within the maximum load line on the inside of the hopper side guides.
- Pull out the hopper extension according to the length of the document before placing the documents.



2 Adjust the hopper side guides to the document width.

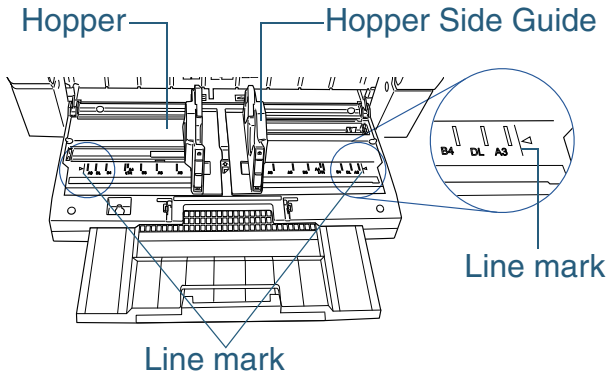
Move the hopper side guides while pressing the side guide clutch so that there is no space left between the documents and the hopper side guides.

Otherwise, the documents may be scanned skewed.



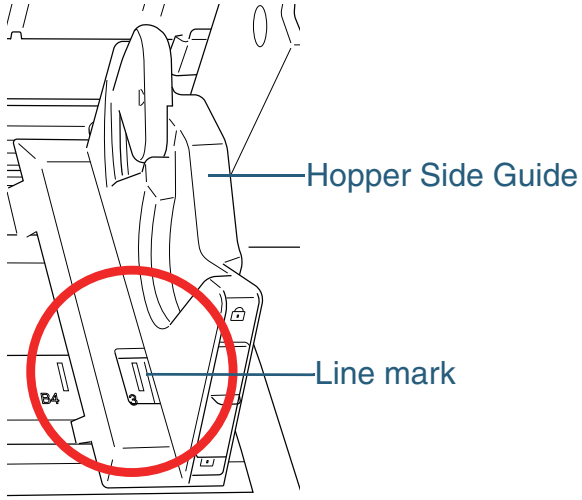
Remove all paper clips and staples. Reduce the amount of documents if a multifeed or pick error occurs.

Make sure that the hopper side guides do not pass the line marks embedded on each side of the hopper.

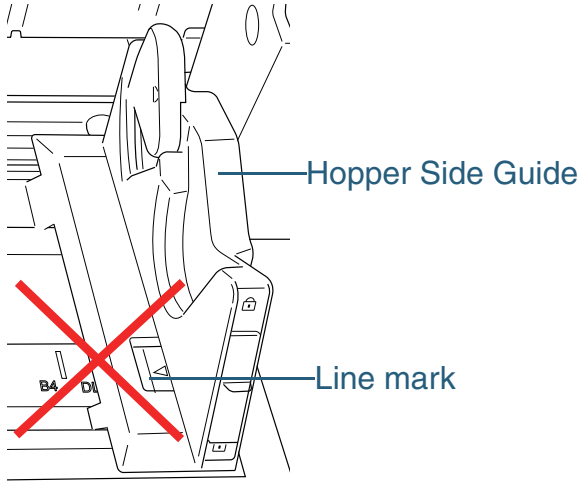


Make sure that the hopper side guides do not pass the line marks embedded on each side of the hopper.

- Good example



- Bad example

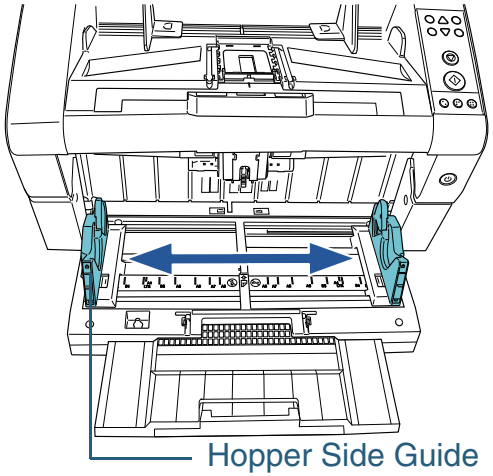


3 Adjust the stacker extension to the document length, and pull up the paper stop.
For information on how to set the stacker, refer to "1.8 Stacker Setting" (page 24).

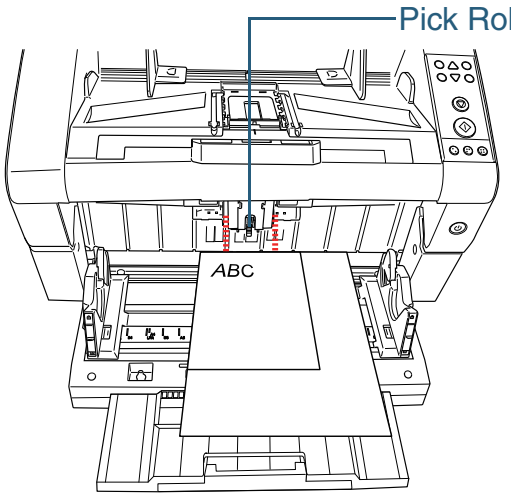
4 Start up an application for scanning and perform a scan.
For information on how to scan using ScandAll PRO, refer to "ScandAll PRO V2.0 User's Guide".

■Setting the documents by the left or right side of the hopper

1 Slide the hopper side guides to their outermost positions.

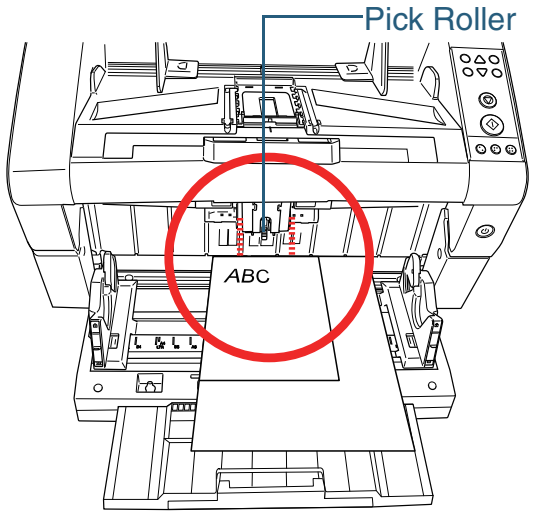


2 Set the documents so that the smallest document can be picked by the pick rollers.
Set the documents with the front side (scanning side) facing up.

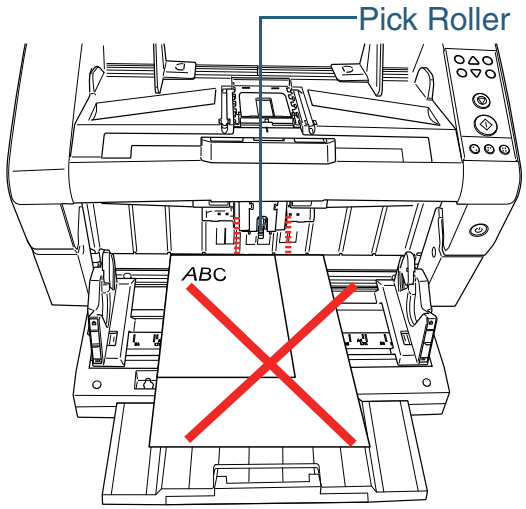


Make sure that all documents are placed underneath the pick roller, otherwise the document will not be picked.

- Good example

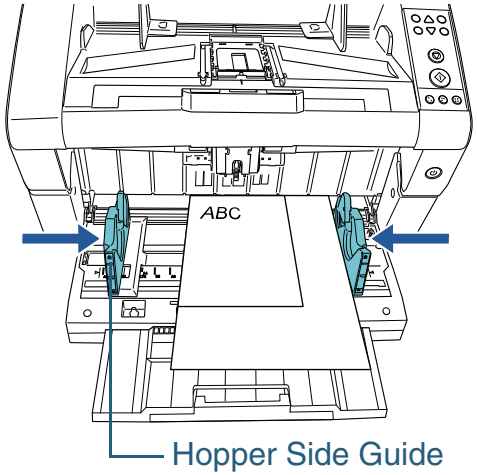


- Bad example



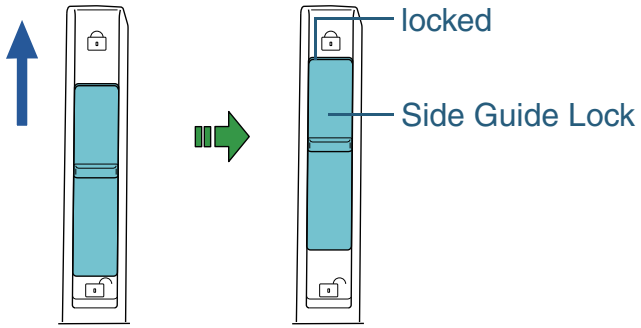
3 Adjust the hopper side guides to the document width.

Move the hopper side guides towards the center as you press the side guide clutches, and leave no space between the hopper side guide and the widest document.



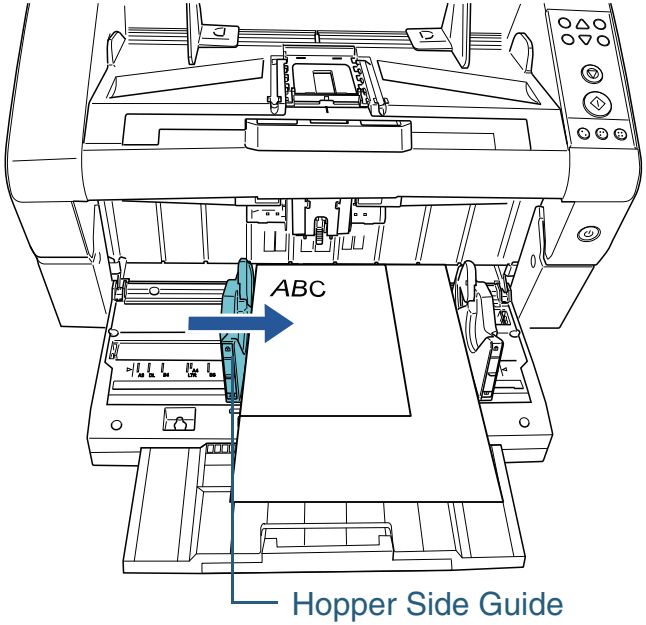
4 Lock one of the hopper side guides.

In this case, lock the hopper side guide on the right side by sliding up the side guide lock.



5 Move the other hopper side guide to the target position while pressing the side guide clutch.

In this case, slide the left hopper side guide as you press the side guide clutch and leave no space between the hopper side guide and the document.



6 Adjust the stacker extension to the document length, and pull up the paper stop.

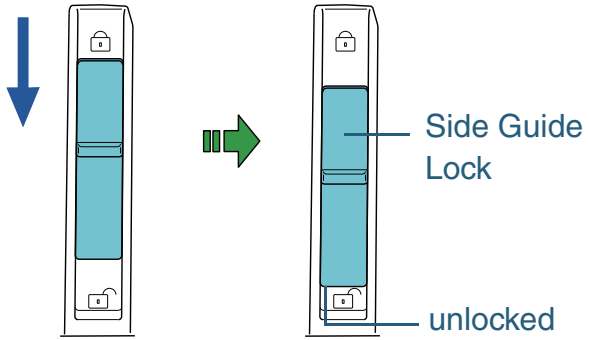
For information on how to set the stacker, refer to "1.8 Stacker Setting" (page 24).

7 Start up an application for scanning and scan the documents.

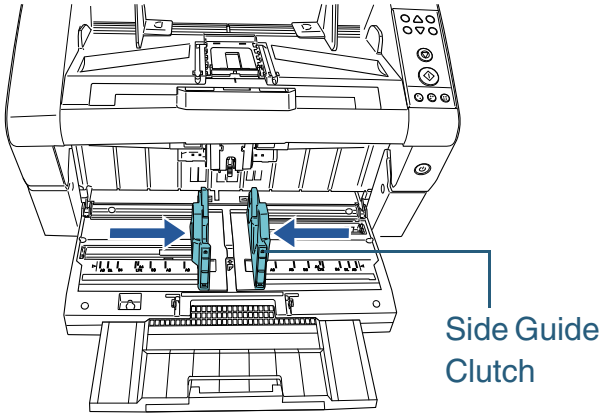
For information on how to scan using ScandAll PRO, refer to "ScandAll PRO V2.0 User's Guide".

To unlock the hopper side guide, follow the steps below.

1 Slide down the side guide lock of the hopper side guide that is locked.



2 Move both hopper side guides towards the center while pressing the side guide clutches.



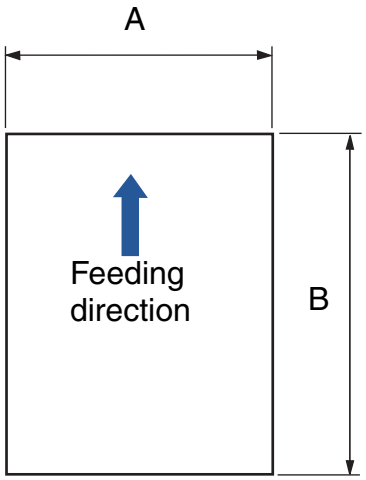
3 Release the side guide clutches.

⇨ Both hopper side guides will now move in conjunction with each other.

2.2 Documents for Scanning

Paper Size

The paper size that can be scanned is specified as follows.



A: 52 to 304.8 mm (2.0 to 12.0 in.)

B: 74 to 431.8 mm (2.9 to 17.0 in.)(*1)

*1: Long Page Scanning supports scanning of documents with a length up to 3048 mm (120 in.) in feeding direction.

Paper Quality

Paper type

Recommended paper types for scanning are as follows:

- Wood-free paper
- Wood containing paper

When using paper types other than the above, make sure to test with the same type of paper and see if it can be scanned before you start scanning the actual document.

Paper weight

Paper weights supported for scanning are as follows:

- A5 or larger, A4 or smaller: 20 to 209.3 g/m^2 (5.5 to 56.1 lb)
- Smaller than A5, larger than A4: 40.7 to 209.3 g/m^2 (11.0 to 56.1 lb)

Precautions

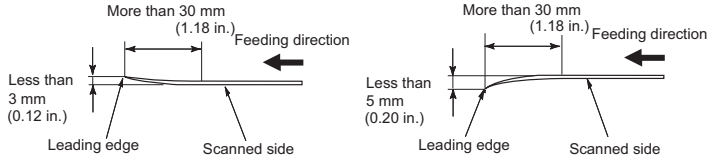
The following types of documents may not be scanned successfully:

- Documents of non-uniform thickness (e.g. envelopes, documents with photographs attached)
- Wrinkled or curled documents
- Folded or torn documents
- Tracing paper
- Coated paper
- Carbon paper
- Photosensitive paper
- Perforated documents
- Documents that are neither square nor rectangular
- Very thin documents
- Photographs (photographic paper)

Also, do not scan the following types of documents:

- Paper-clipped or stapled documents
- Documents on which the ink is still wet
- Documents smaller than A8 size
- Documents wider than 304.8 mm (12.0 in.)
- Documents other than paper such as fabric, metal foil and OHP film.
- Important documents such as certificates and cash vouchers which must not be damaged

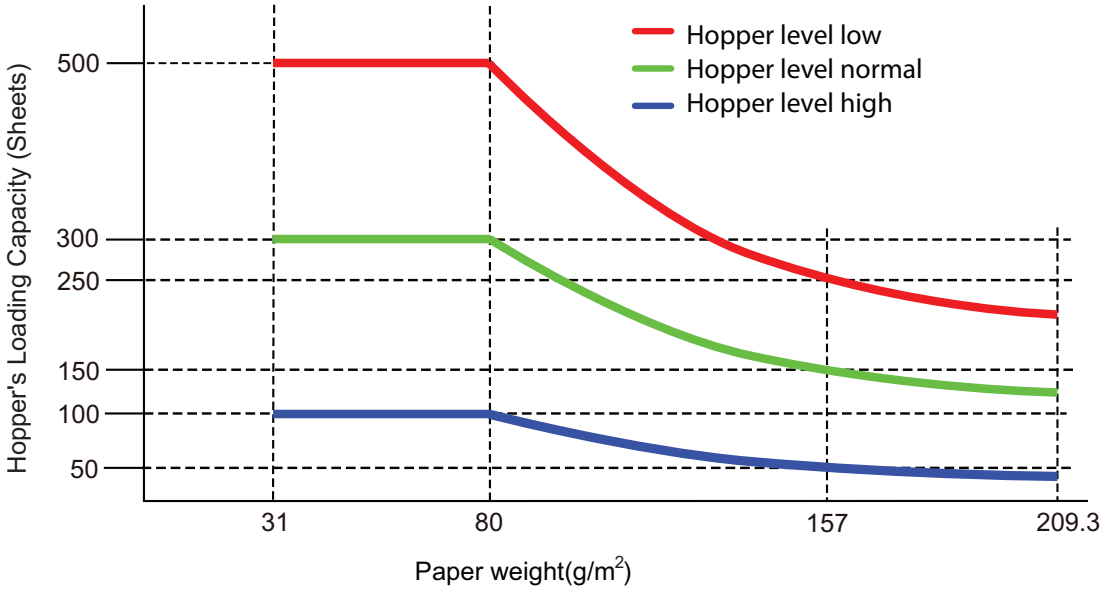
- To scan a document that is semi-transparent, increase the brightness level to avoid bleed-through.
- To prevent the rollers from becoming dirty, avoid scanning documents that contain large areas filled with pencil lead. If you have to scan such documents, make sure to perform cleaning frequently.
  A message may appear when you scan a lot of documents written with pencil. For more details, refer to "8.2 Error Indications on Operator Panel" (page 145).
- If multifeeds, pick errors, or paper jams occur frequently, refer to "1.9 Adjusting the Paper Separation Force" (page 26) for troubleshooting.
- All documents must be flat on the leading edge. Make sure that curls on the leading edge of the documents are kept within the following range:



- Since carbonless papers contain chemical substances which may harm the rollers (e.g. pick roller), be aware of the following risks:
  Cleaning: If paper jams occur frequently, clean each roller. For information on how to clean the rollers, refer to "Chapter 6 Daily Care" (page 121).
  Parts replacement: The life of each roller may end sooner compared to scanning wood containing papers.
- When scanning wood containing papers, the life of each roller may end sooner compared to scanning wood-free papers.
- Rollers may be damaged when a photo/sticky note on the document contacts the rollers during scanning.
- The surface of the document may be damaged when scanning gloss papers such as photographs.

Loading Capacity

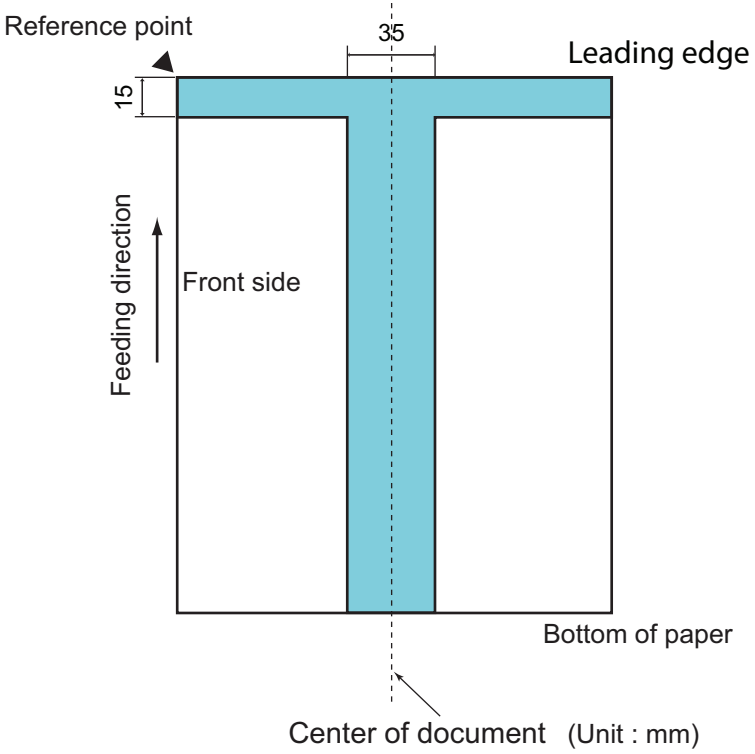
The number of sheets that can be loaded on the hopper is determined by the paper size and paper weight of the document. See the following graph:



Paper weight (unit)	Conversion											
g/m^2 (paper weight)	31	40	52	64	75	80	90	104	127	157	203	209
lb	8.3	11	14	17	20	21	24	28	34	42	54	56.1
kg	26.7	35	45	55	64.5	69	77.5	90	110	135	174	180

Areas Not to be Perforated

An error may occur when there are punched holes in the area shaded in light blue in the following picture.



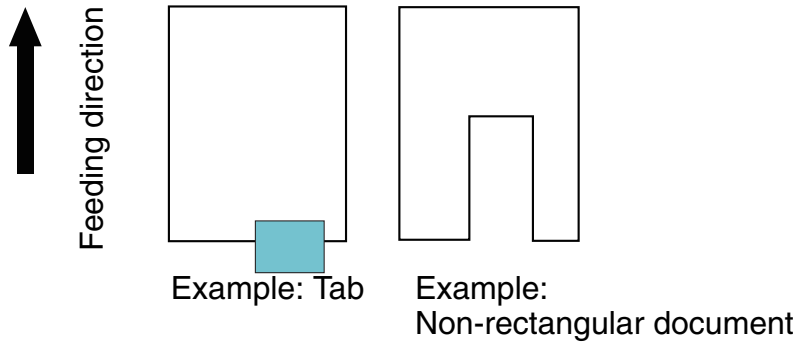
The above condition applies when the document is set to the center of the pick roller width.

If there are any holes in the 35 mm-wide central column, you can move the document to the left or right to avoid an error.

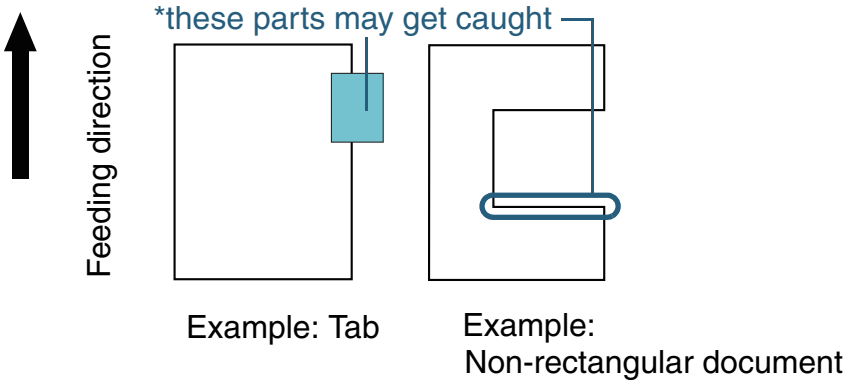
Loading Documents with Tabs or Non-rectangular Documents

To scan a document with tabs or a document that is non-rectangular, place it in a way that does not get caught when it is being fed through.

Good example:



Bad example:



- When you perform scanning as shown in the bad example above, the indicated sections may be caught during feeding. This may cause a paper jam or tear the document.
- When a tab or the non-rectangular part of the document does not pass above the feed roller/assist roller, these parts of the document may remain in the generated image and turn out elongated.

Conditions for Multifeed Detection

Multifeed is an error when two or more sheets are fed through the ADF at once. It is also called a “multifeed” when a different document length is detected.
Multifeed detection is performed by either checking the overlapping of documents, length of the documents, or the combination of both. The following conditions are required for an accurate detection.

Detection by overlapping

- Load documents of the same thickness onto the hopper.
- Paper weight: 20 to 209.3 g/m^2 (5.5 to 56.1 lb) / 0.025 to 0.25 mm (0.001 to 0.010 in.)
- Do not punch holes within 35 mm (1.38 in.) of the vertical lines in the left, center and right of the document. See Fig.1.
- Do not attach other documents within 35 mm (1.38 in.) of the vertical lines in the left, center and right of the document. See Fig.1.

Detection by length

- Load documents of the same length onto the hopper.
- Variance in document lengths: 1% or less
- Do not punch holes within 35 mm (1.38 in.) over the vertical center line of the document. See Fig. 2.

Detection by overlapping and length

- Load documents of the same thickness and the same length onto the hopper.
- Paper weight: 20 to 209.3 g/m^2 (5.5 to 56.1 lb) / 0.025 to 0.25 mm (0.001 to 0.010 in.)
- Variance in document lengths: 1% or less
- Do not punch holes within 35 mm (1.38 in.) of the vertical lines in the left, center and right of the document. See Fig.1.
- Do not attach other documents within 35 mm (1.38 in.) of the vertical lines in the left, center and right of the document. See Fig.1.

The above condition applies when the document is set to the center of the pick roller width.

Fig.1

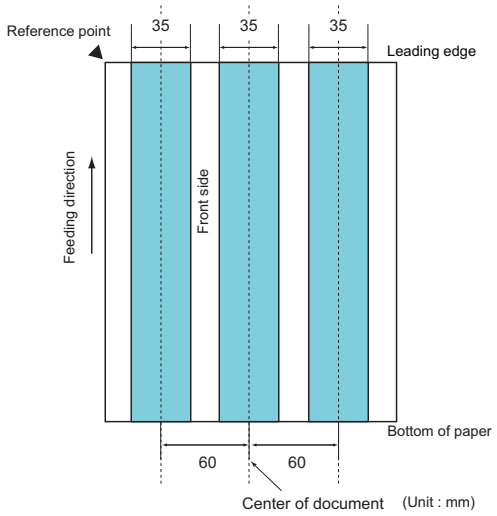
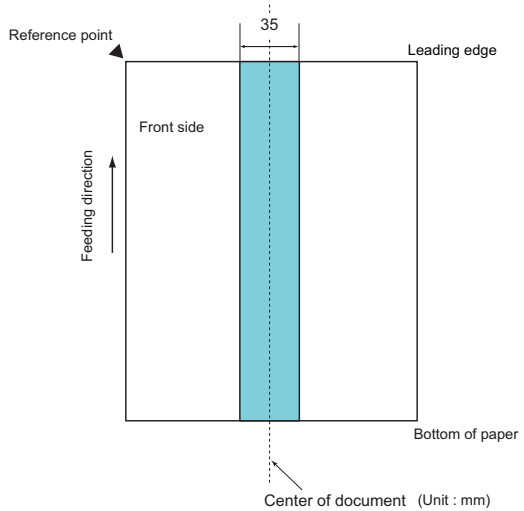


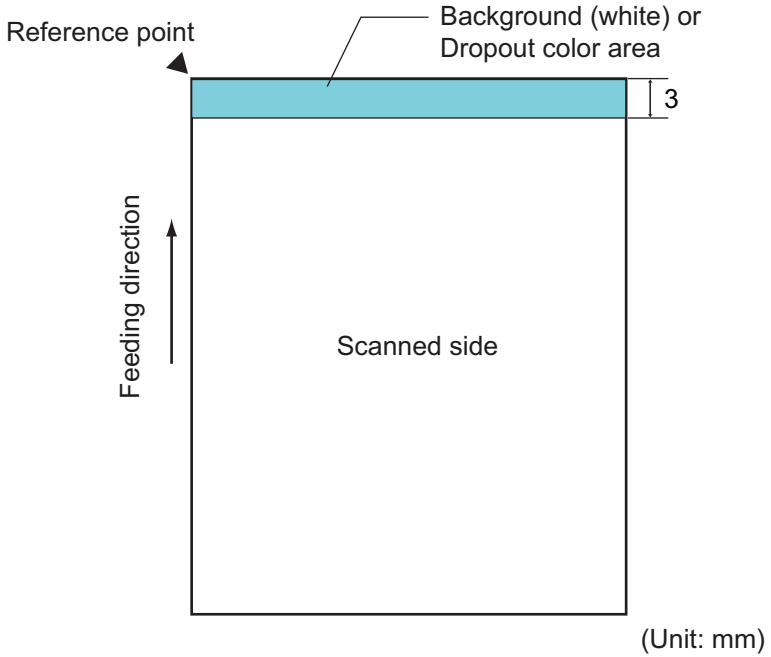
Fig.2



- The rate of multifeed detection may drop with some documents. Multifeed cannot be detected in the area of 15 mm from the leading edge of the document.
- The areas in Fig.1 can be changed in the Software Operation Panel. For more details, refer to "9.5 Settings Related to Multifeed Detection" (page 210).

Restricting the Background Color Area

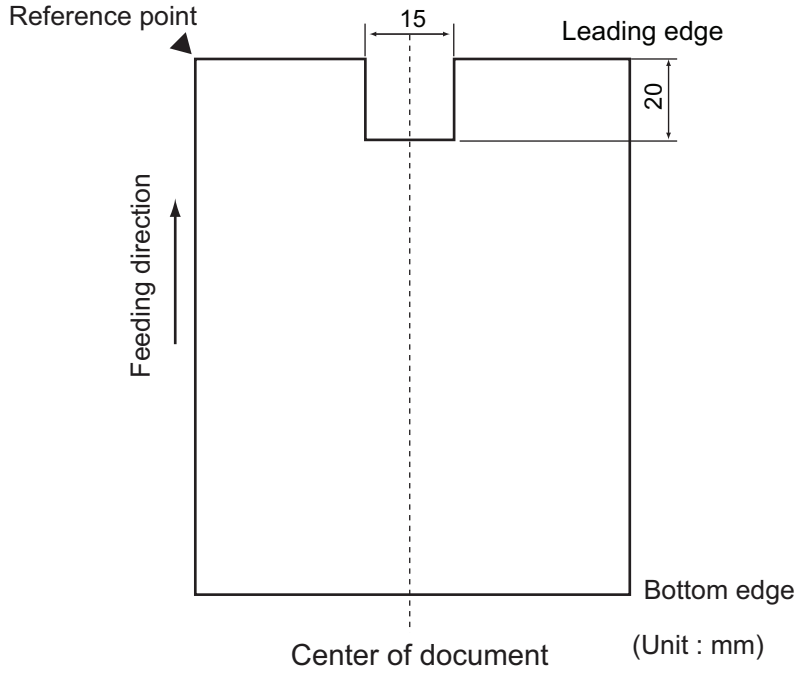
The scanning area from the leading edge to the first 3 mm should be in white (ground color of the document).
If [White Level Follower] is enabled, the following area (shaded in light blue) must be the same as the ground color or the color to be dropped out.
If the document contains text, frames or signatures in this area, disable [White Level Follower].



For details about [White Level Follower], refer to the TWAIN Scanner Driver Help.

Job Separation Sheet

The following is a typical form of a Job Separation Sheet.



The document must be wider than A4/Letter size (210 mm/ 8.27 in.).

> The above condition applies when the document is set to the center of the pick roller width.

Scanning a Mixed Batch of Documents

The following restrictions apply when scanning a mixed batch of documents with different paper thicknesses/friction coefficients/sizes. Always test scan a few sheets and see if the documents can be fed through before scanning a mixed batch of documents.

For information on how to scan mixed batches, refer to "Scanning Documents of Different Widths" (page 86).

Paper type

Align the direction of the paper fiber with the feeding direction.

Paper weight

When scanning documents with different paper weight in the same batch, keep the paper weight within the following range:

- A5 or larger, A4 or smaller: 20 to 209.3 g/m^2 (5.5 to 56.1 lb)
- Smaller than A5, larger than A4: 40.7 to 209.3 g/m^2 (11.0 to 56.1 lb)

Friction coefficient

We recommend that you use the same type of paper from the same manufacturer.

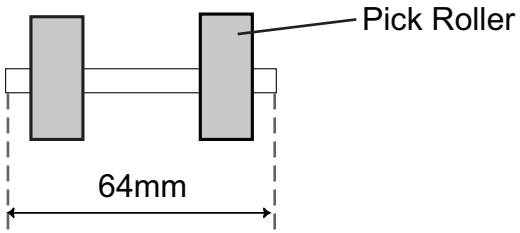
When papers of different manufacturers/brands are mixed, it affects the feeding performance as the difference in the friction coefficient increases.

The recommended friction coefficients are as follows:

0.35 to 0.60 (reference value for paper friction coefficient)

Document position

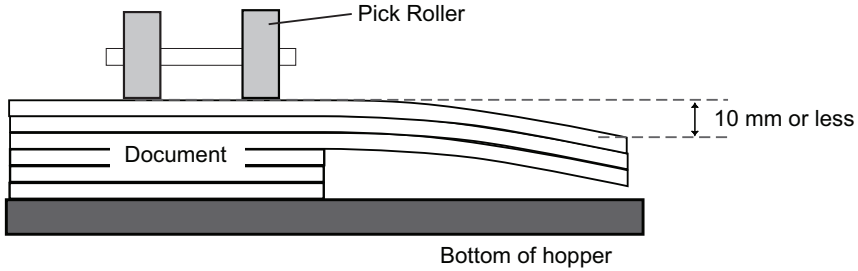
Use paper sizes that fit the 64 mm width of the pick rollers in the center.



Paper size

When a set of wider documents is placed on top of smaller documents within the same batch, the wider documents on top may hang down and affect the feeding performance.

Try to meet the following condition:



- When scanning a mixed batch of documents with different sizes, it is more likely to skew because the hopper side guides do not function on every sheet. We recommend scanning with [Automatic Page Size Detection] enabled.
- Multifeed detection by checking the length cannot be used together with [Automatic Page Size Detection].

Refer to the table below when mixing documents of different sizes.

Maximum size			A3	DL	B4	LTR	A4	B5	A5	B6	A6	B7	A7	B8	A8
	Width (mm)		297	279	257	216	210	182	149	129	105	91	74.3	64.3	52.5
Minimum size	A3	297	■												
	DL	279	■	■											
	B4	257	■	■	■										
	LTR	216	■	■	■	■									
	A4	210	■	■	■	■	■								
	B5	182	■	■	■	■	■	■							
	A5	149			■	■	■	■	■						
	B6	129				■	Available range			■					
	A6	105				■	■	■	■	■	■				
	B7	91					■	■	■	■	■	■			
	A7	74.3						■	■	■	■	■	■		
	B8	64.3						■	■	■	■	■	■	■	
	A8	52.5													■

DL: 11 × 17 inches

LTR: Letter size

A8 size cannot be scanned in a mixed batch.

Chapter 3 Configuring the Scan Settings

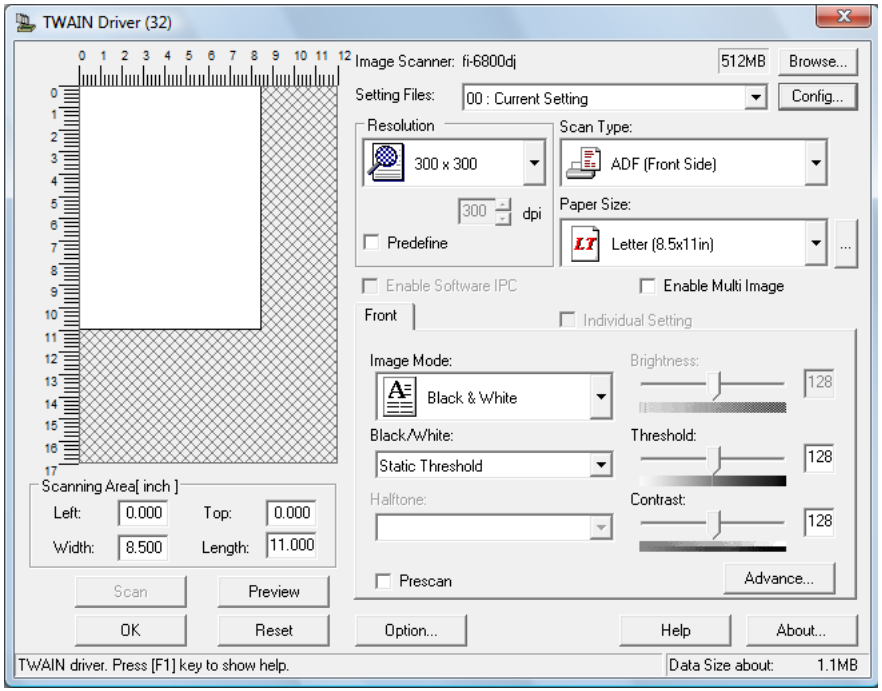
This chapter explains about the scan parameters of the scanner drivers.

3.1 TWAIN Scanner Driver 49
3.2 ISIS Scanner Driver 53

3.1 TWAIN Scanner Driver

The TWAIN scanner driver is a software driver that conforms to the TWAIN standard. This driver can be used with an application that supports TWAIN to perform scanning. Normally, the scanner driver is launched via an application, and then the scan settings are configured in the setup dialog box of the driver (some applications may not display the setup dialog box).

> Ways to launch the scanner driver differ depending on the application.
> For more details, refer to the manual or the Help files of the application.



Settings for the TWAIN scanner driver are configured in the above dialog box.
The following are descriptions of the main configuration items. For more details, refer to the TWAIN Scanner Driver Help.

[Resolution]

Specify the resolution for scanning.
You can either select a predefined value from the list, or specify a custom resolution (from 50 to 600 dpi, in increments of 1 dpi).
By selecting the [Predefine] check box, you can also easily perform scanning by selecting a predefined resolution from [Best], [Better], and [Normal].
Values in [Predefine] can be changed by clicking the [...] button.

[Scan Type]

Specify the side(s) to scan.
Scanning side(s) can be specified as follows:

- ADF Front Side
- ADF Duplex
- Long Page (Front side)
- Long Page (Duplex)
- ADF Back Side

[Paper Size]

Select a paper size from the displayed list.
Up to three custom sizes can be added to the list by using the [...] button.
You can also change the order in which the items (sizes) are listed.

[Image Mode]

Specify the output image type for the scanned images.

Mode	Description
Black&White	Scanned in binary (black & white) mode.
Halftone	Scanned through halftone processing in binary (black & white) mode.
Grayscale	Scanned in gradations from black to white. Select either [Grayscale] (256) or [4bit Grayscale] (4-bit or 16 grayscale).
SEE (Selectable Edge Enhancement)	Line drawings and photographs are scanned using halftone processing, emphasizing the lines and text on the document. This mode is most suitable when you want to emphasize only the text in a document that contains both text and photographs.
Color	Scanned in color mode. Select a color mode from [24 Color] (24-bit color), [256 Color] (256 colors), and [8 Color] (8 colors).

[Scan] Button

Click this button to start scanning by the current settings.

[Preview] Button

This button allows you to preview the scanned image. Perform a test scan by the current settings and display the result in the Preview window.

[Close] / [OK] Button

Click this button to save the current settings and close the window.

[Reset] Button

Click this button to undo the changes made.

[Help] Button

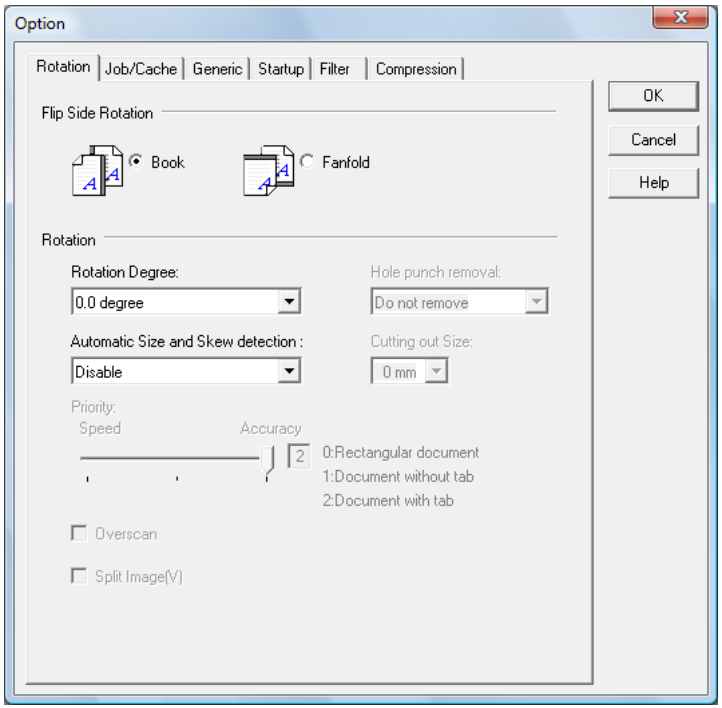
Click this button to display the TWAIN Scanner Driver Help. It can also be displayed by the [F1] key.

[About] Button

Click this button to display the version information of the TWAIN Scanner Driver.

[Option] Button

Configure the options in the following window.



- [Rotation] Tab
  Configures settings such as the binding direction of double-sided documents, image rotation, deskew, page size detection, end of page detection, overscan, hole punch removal and cropping width.
- [Job/Cache] Tab
  Configures settings such as caching, batch detection, multifeed detection, displaying the multifeed image, pre-pick, paper protection, and blank page skip.
- [Imprinter (Endorser)] Tab
  Specifies the print settings for the imprinter which is available separately.
  This tab does not appear if the imprinter is not installed.

- [General] Tab
  Specifies the units to display in the [TWAIN Driver (32)] dialog box.
  Select from inch, mm, and pixel.
- [Startup] Tab
  Configures the settings of the operator panel on the scanner.
- [Filter] Tab
  Selects the filter for image processing.

Item	Description
Digital Endorser	Adds alphanumeric character strings on the scanned image data.
Page Edge Filler	Fills in the margins of the scanned image in a specified color.

- [Compression] Tab
  Specifies the compression rate for JPEG transfer.

[Advance] button

Click this button to configure detailed settings related to image processing.
Items such as Gamma Pattern, White Level Follower, Dropout Color, Reverse, and Edge Extract can be configured.

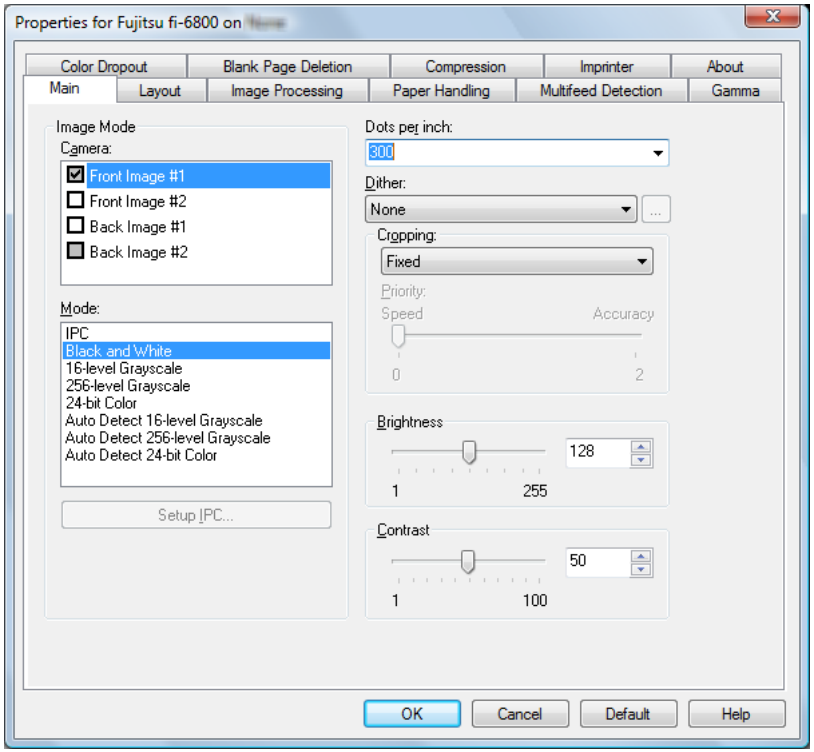
[Config] button

Click this button to manage the setting files.
By saving the settings configured in the [TWAIN Driver (32)] dialog box onto a file under [Setting File], you can change the scan settings easily.

3.2 ISIS Scanner Driver

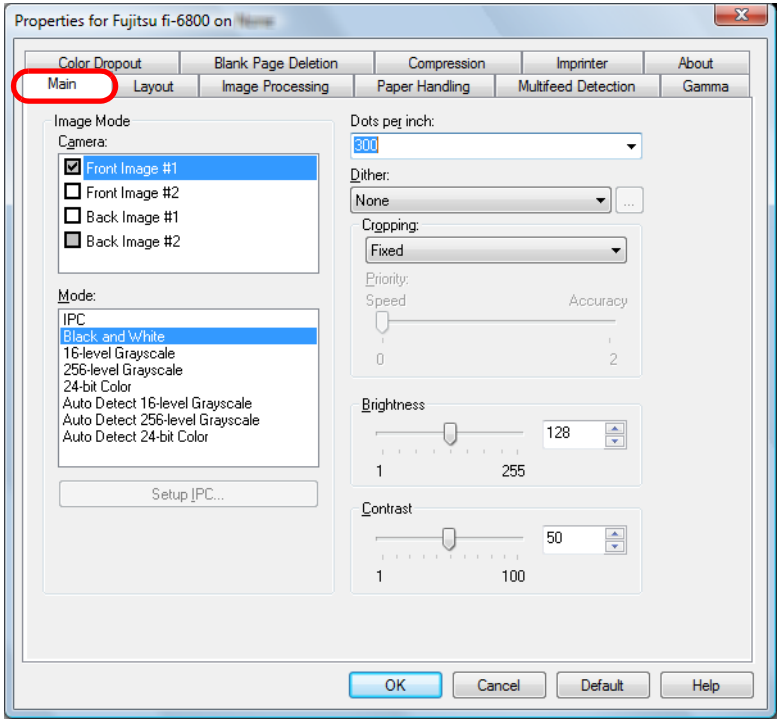
The ISIS scanner driver is a software driver which conforms to the ISIS standard. This driver can be used with an application that supports ISIS to perform scanning.
Normally, the scanner driver is launched via an application, and then the scan settings are configured in the setup dialog box of the driver (some applications may not display the setup dialog box).

> Ways to launch the scanner driver differ depending on the application.
> For more details, refer to the manual or the Help files of the application.



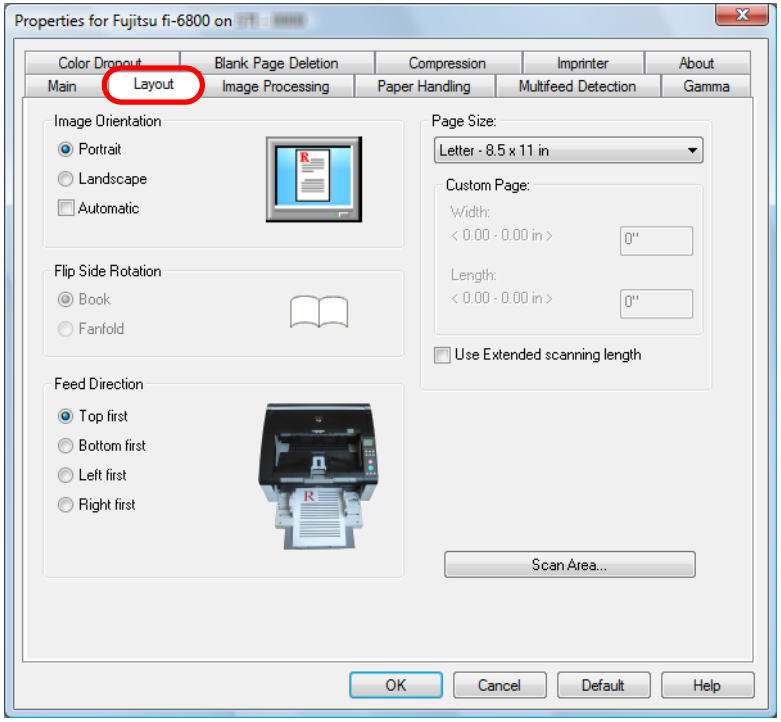
Settings for the ISIS scanner driver are configured in the above dialog box.
For more details, refer to the ISIS Scanner Driver Help.

[Main] Tab



Settings such as the scanning side(s), color (color/grayscale/black & white), resolution, brightness and contrast can be configured.

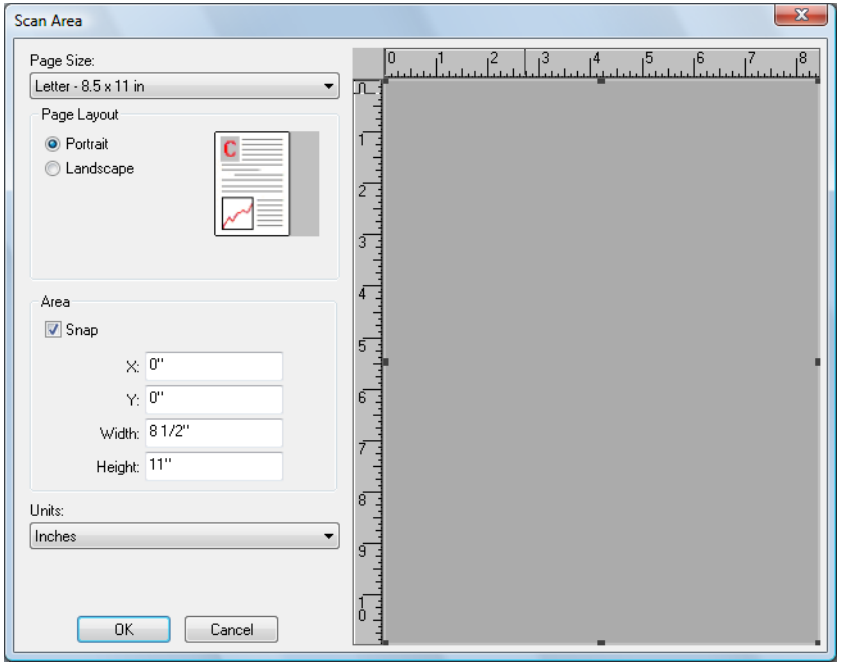
[Layout] Tab



Settings such as the page orientation of the document to scan, the binding direction for duplex scanning, feeding direction and paper size can be configured.
Clicking the [Scan Area] button displays the [Scan Area] dialog box.

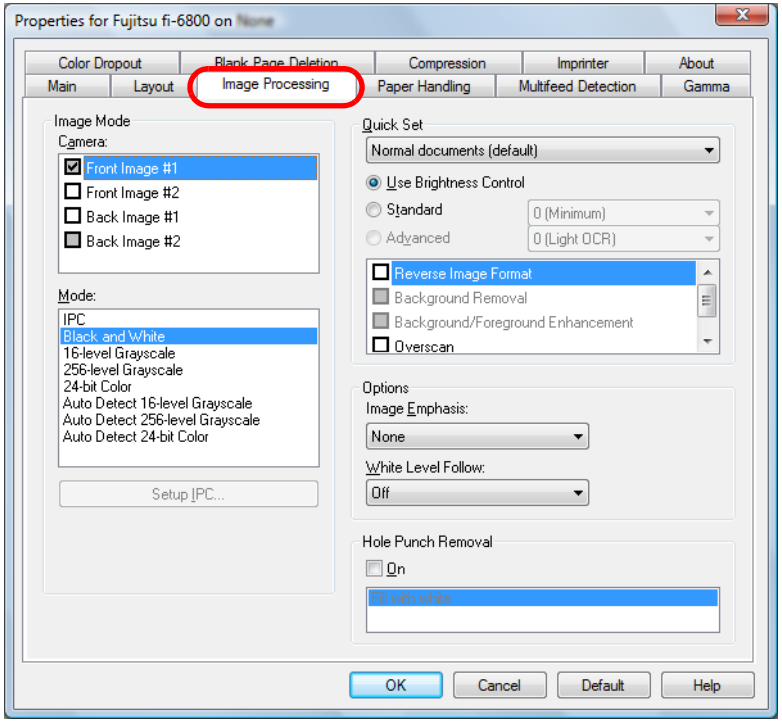
> For [Image Orientation], [Automatic] is available only when ScandAll PRO is installed.

[Scan Area] Dialog Box



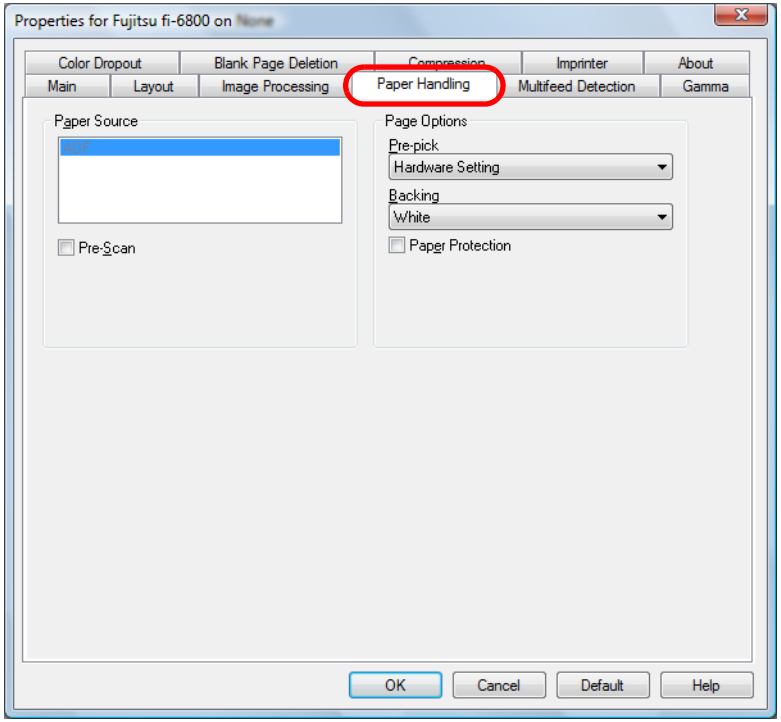
You can select the scan area for the specified paper size.

[Image Processing] Tab



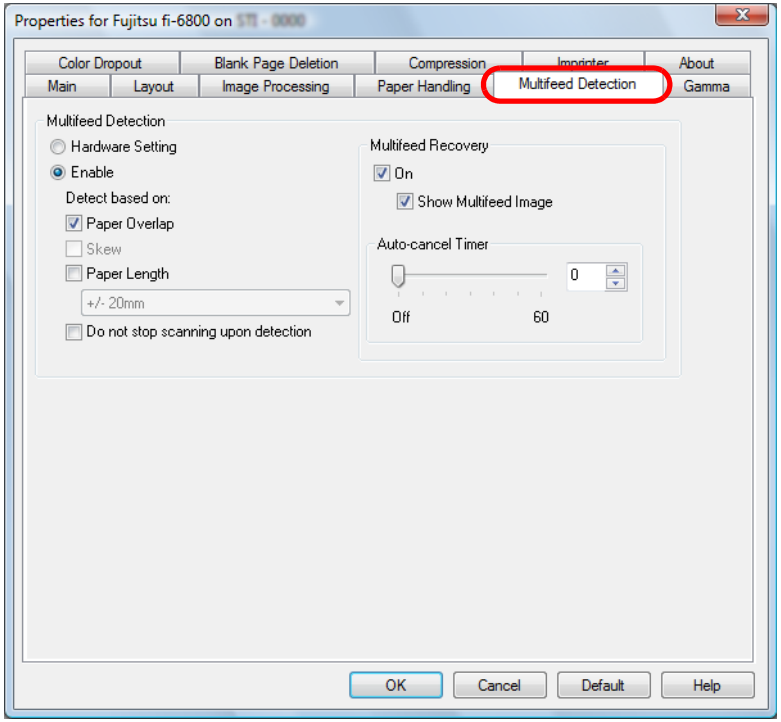
You can select a configuration pattern that is used frequently for scanning.
Also, you can configure settings for scanning documents with non-white background, or with punched holes.

[Paper Handling] Tab



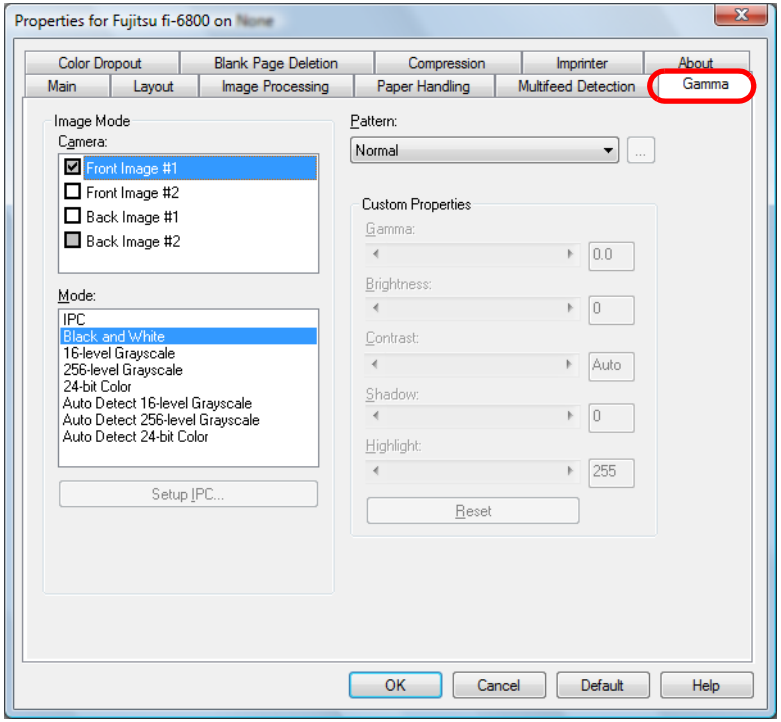
You can configure settings such as prescan, pre-pick (i.e. feeding the document to the starting position before scanning), and paper protection.

[Multifeed Detection] Tab



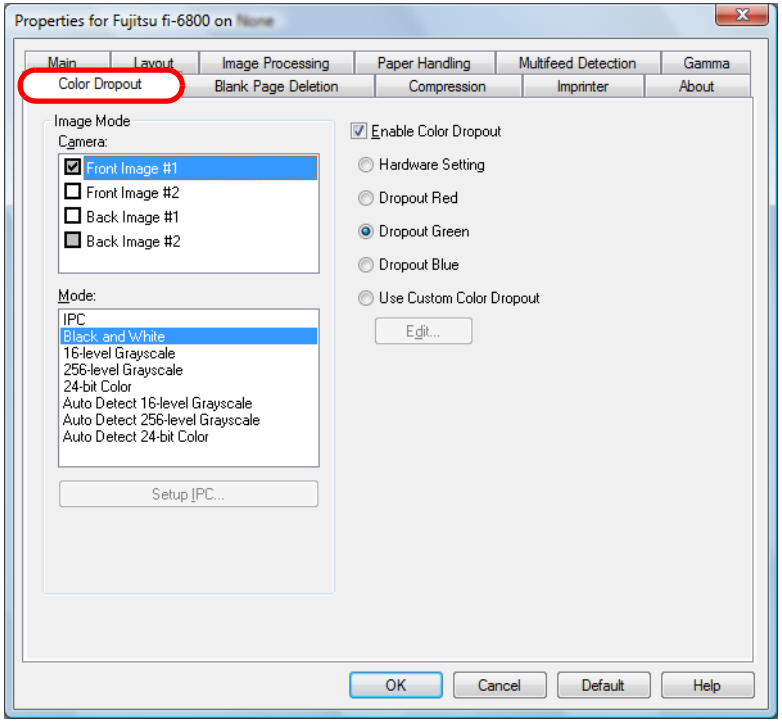
You can configure the setting for multifeed detection.

[Gamma] Tab



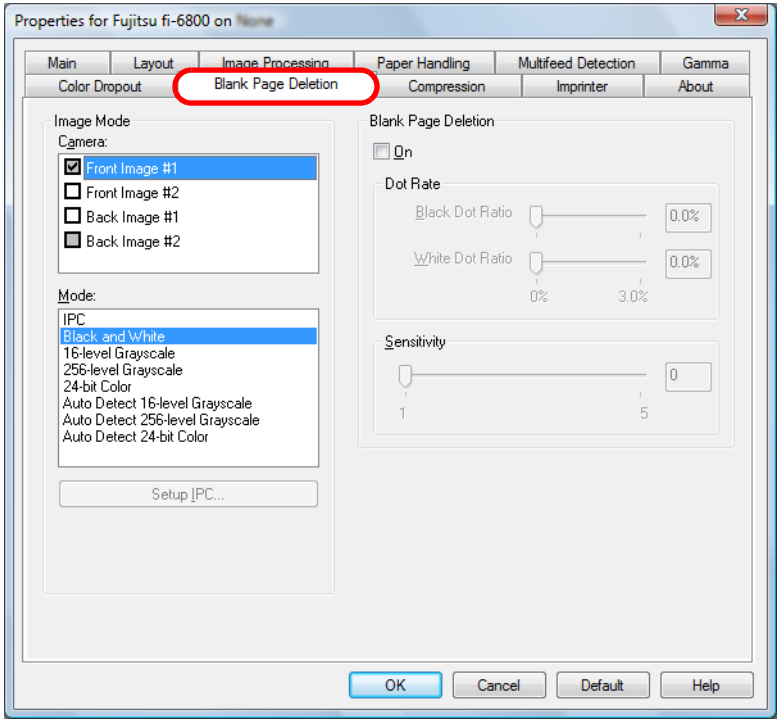
You can specify the gamma correction pattern. You can customize detail settings such as the gamma value and brightness.

[Color Dropout] Tab



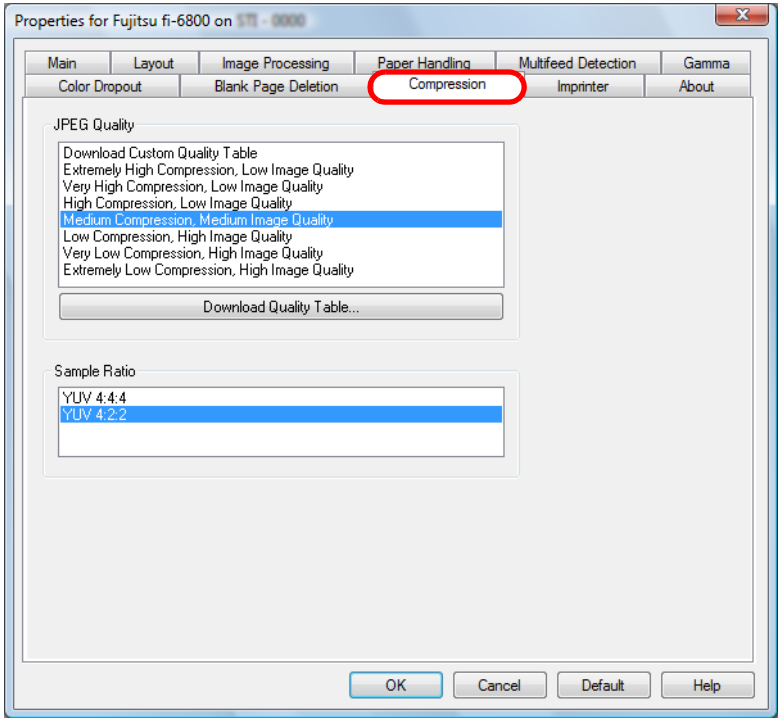
You can select a color to drop out from the image.

[Blank Page Deletion] Tab



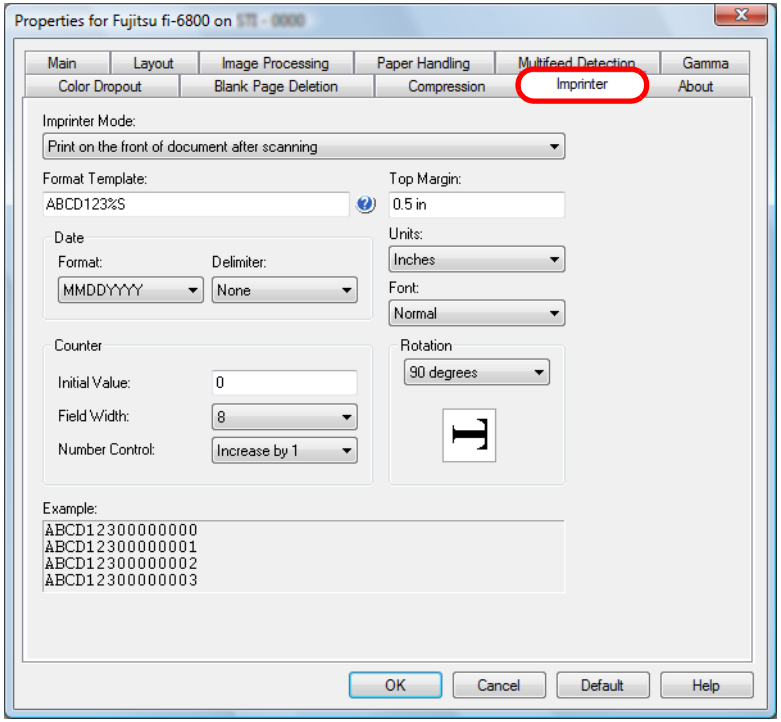
You can configure the setting for deleting blank pages.
When scanning in black & white, you can use the dot rate to process the blank page(s) for the white and black backgrounds separately.
When scanning in grayscale/color, you can use the sensitivity to process the blank page(s) for the white and black backgrounds together.

[Compression] Tab



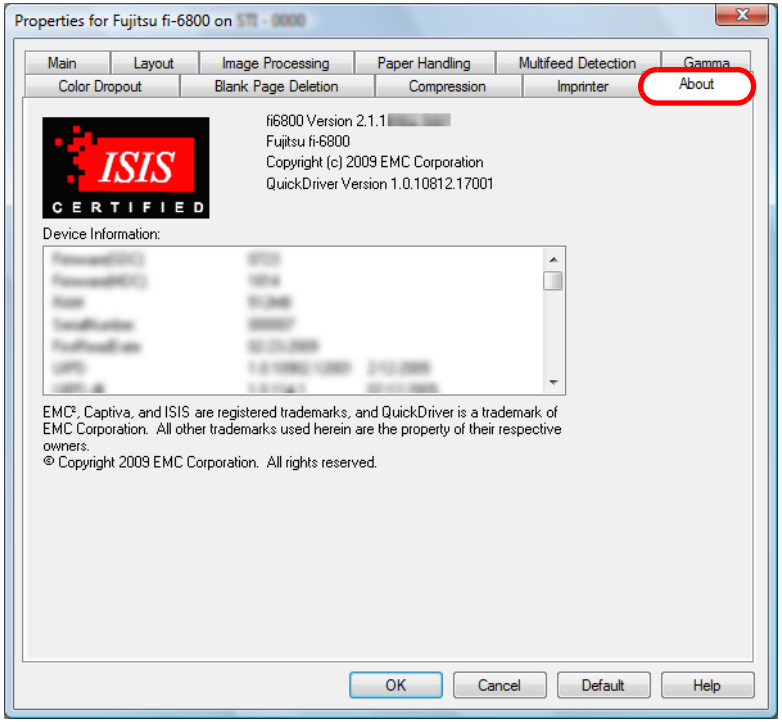
You can specify a compression rate and the image quality for scanning in color/grayscale.
You can also configure a sample ratio used for compression.

[Imprinter] Tab



You can specify the print settings for the imprinter option which is available separately. This tab does not appear if the imprinter is not installed.

[About] Tab



Select this tab to view the version information on the ISIS scanner driver and the information on the scanner that is connected to the computer.

Chapter 4 How to Use the Operator Panel

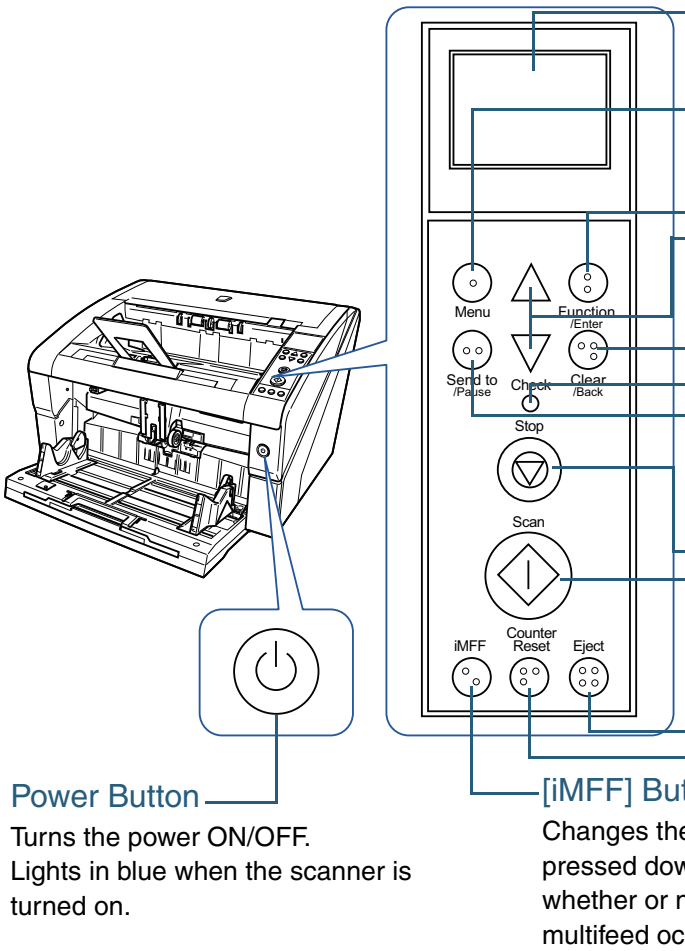
This chapter explains how to use the operator panel.

4.1 Operator Panel 61
4.2 Main Menu 65
4.3 Function Selection 81

4.1 Operator Panel

The operator panel consists of an LCD, buttons and LED.

Names and Functions of the Operator Panel



LCD
Indicates the status of the scanner.

[Menu] Button
Configures various types of scanning operations.

[△] / [▽] Button
Switches the selected item.
Changes the paper separation force.

[Send to/Pause] Button (*1)
Launches the linked application software.
Pauses the scan.

[Scan] Button (*1)
Launches the linked application software.
Resumes the scan.

[Function/Enter] Button
Confirms the selected item.
Switches the number (No.01 to No.50 / No.C) for the application launched by pressing the [Send to/Pause] button.

[Clear/Back] Button
Cancels the selected item and returns to the previous screen.
Clears the displayed error indication.

Check LED
Lights in orange when an error occurs.
Flashes when consumables reach the end of the life cycle.

[Stop] Button
Stops the scan immediately.

[Eject] Button
Ejects the document when a multifeed occurs.

[Counter Reset] Button
Resets the page counter.
Stops the scan when pressed while scanning in Manual Feed mode.

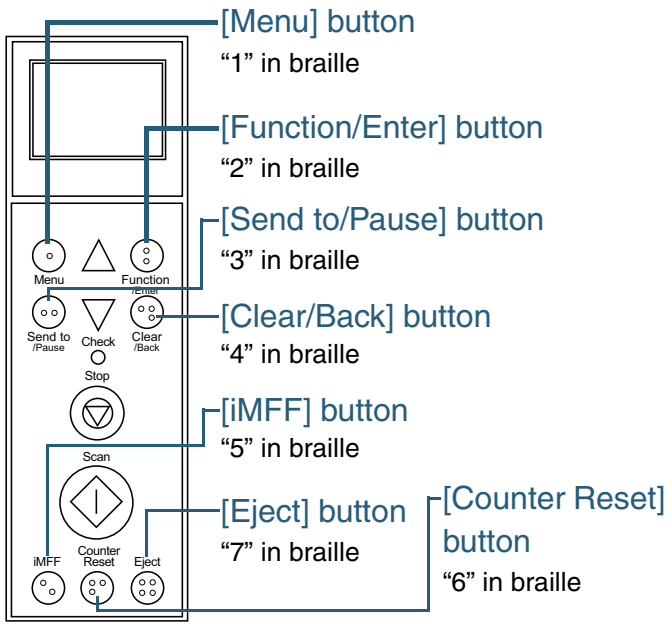
Power Button
Turns the power ON/OFF.
Lights in blue when the scanner is turned on.

[iMFF] Button
Changes the settings for Intelligent Multifeed function when pressed down (for more than two seconds). Determines whether or not to memorize the pattern if pressed when a multifeed occurs.

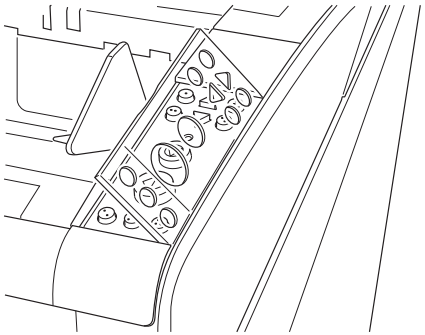
*1: For information on how to scan by using the [Scan] button or [Send to/Pause] button, refer to the TWAIN Scanner Driver Help provided in the Setup DVD-ROM or "Using a Button on the Scanner to Start Scanning" (page 113).

Do not use the operator panel while the Software Operation Panel is running.

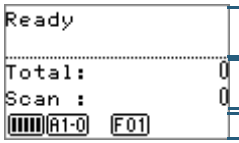
- Buttons on the operator panel are also braille buttons, allowing users to understand the button's function by touching the button.

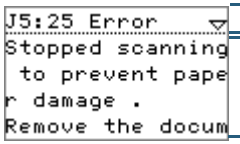
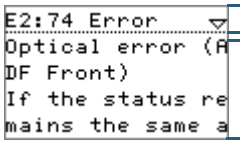


- Apart from English, the operator panel can also display French, German, Italian, Spanish, Russian and Chinese (Simplified). You can open the clear cover and replace the overlay (a sheet on which another language is written).



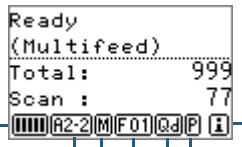
Indications on LCD

Display	Description
	Processing initialization.
	Ready to start scanning. Indicates that the initialization was successfully completed. For more details about the indicators, refer to "About the Indicators" (page 64).
	An item from the menu can be selected. When you press the [Menu] button in the [Ready] screen, the [Main Menu] screen is displayed. Main Menu is used to configure various operational settings upon scanning. For details about the Main Menu screen, refer to "4.2 Main Menu" (page 65).
	When you press the [Function/Enter] button in the [Ready] screen, the [Function Selection] screen is displayed. By using this, you can configure an application to launch when the [Send to/Pause] button is pressed. For details about the Function Selection screen, refer to "4.3 Function Selection" (page 81).

Display	Description
	Indicates that a recoverable error occurred during scanning. Error codes beginning with the letter "J" or "U" are displayed. For more details about the errors, refer to "Temporary Errors" (page 146). You can clear the error display by pressing the [Clear/Back] or the [Stop] button. Note that if the error is “Paper jam”, the message disappears after a certain amount of time elapses with no documents ([Ready] status) in the scanner.
	Indicates that a device error occurred during initialization or scanning. Error codes beginning with the letter "E", "F", "C", "H", "A" or "L" are displayed. For more details about the errors, refer to "Device Errors" (page 149). When this indication of a device error is displayed, turn the power off then back on from the main power switch. If the indication continues to appear after turning the power back on, contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

Display	Description
	When the scanner has not been in operation for the set sleep interval, it enters power saving mode. Press any button on the operator panel to return to the previous screen.

About the Indicators



Paper Separation Force

Displays the paper separation force as follows:

Icon	Low High
	■□□□□
	■■□□□
	■■■□□
	■■■■□
	■■■■■

For information on how to adjust the paper separation force, refer to "1.9 Adjusting the Paper Separation Force" (page 26).

iMFF Setting

Displays the iMFF setting as follows:

Icon	Mode
	Manual mode
	Auto mode 1
	Auto mode 2

The icon switches when the [iMFF] button is pressed down for more than two seconds. In Manual mode, is displayed at all times.
In Auto mode 1 and Auto mode 2, it displays the number of multifeed patterns memorized (max. of 8 patterns). For information on how to configure the iMFF setting, refer to "4.2 Main Menu" (page 65).

Multifeed Pattern Memory

appears when memorizing a multifeed pattern.
For information on how to memorize multifeed patterns, refer to "Bypassing Multifeed Detection for a Fixed Format" (page 117).

Information

appears when a message for replacing consumables/cleaning/replacing maintenance parts/regular maintenance is displayed.

For instructions on when is displayed, refer to "4.2 Main Menu" (page 65).

Prioritize Panel Settings

appears when the operator panel settings are prioritized.
For information on how to prioritize the operator panel settings, refer to "4.2 Main Menu" (page 65).

MF Quick Change Setting

Displays whether or not to detect multifeed as follows:

Icon		Detection method
Normal	Doc Counting Mode	
		Enable (Detect)
		Enable (Ignore)

The icon switches when the [Eject] button is pressed. Normally, one of the above icons for “Normal” appears when [Enable(Detect)] or [Enable(Ignore)] is specified. For information on how to configure the MF Quick Change setting, refer to "4.2 Main Menu" (page 65). In Doc Counting mode, one of the above icons for “Doc Counting Mode” appears regardless of the MF Quick Change setting.

[Send to/Pause] Button Configuration Number

Displays the number assigned to the application that is launched when the [Send to/Pause] button is pressed. For information on how to configure the [Send to/Pause] button, refer to "4.3 Function Selection" (page 81).

4.2 Main Menu

This section explains about the Main Menu.
When you press the [Menu] button in the [Ready] screen, the [Main Menu] screen is displayed.
The Main Menu can be used to configure various operational settings upon scanning.

How to Use Main Menu

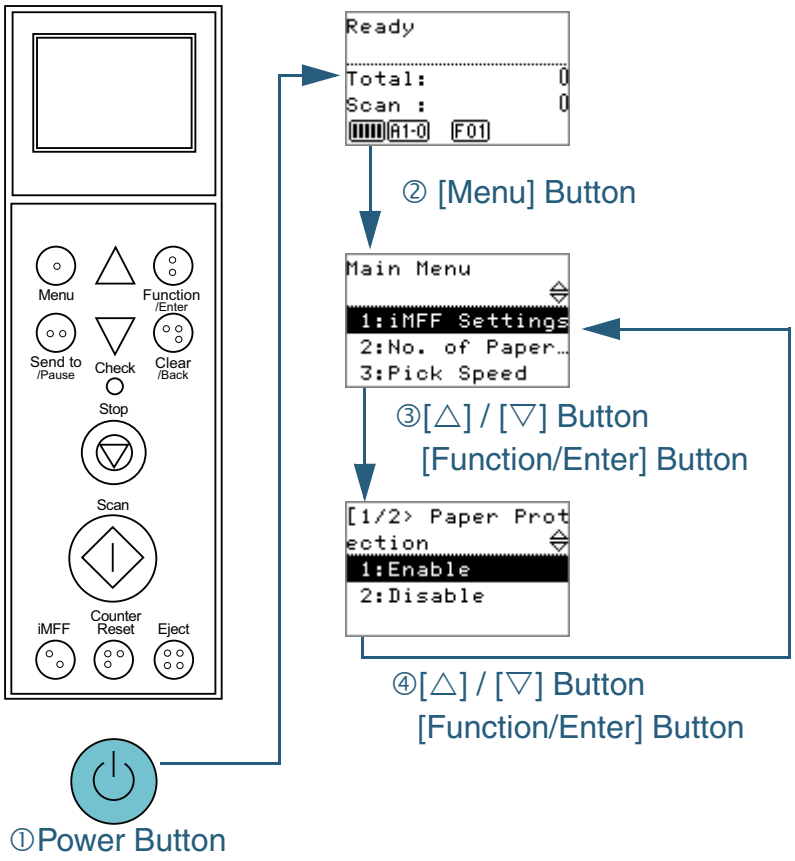
This section explains how to use the Main Menu of the operator panel by the following categories.

Operation	Description	Setting Item
Operational Settings	You can configure various settings for operating the scanner and using the operator panel. For more details about settings, refer to "Operational settings" (page 67).	1: iMFF settings 2: No. of Paper Feed Retries 3: Pick Speed 4: Soft Pick Setting 5: Manual Feed Timeout 6: Paper Protection 7: MF Quick Change 8: Alarm Volume 9: Stacker Positioning 10: Hopper Level 11: Paper Separation Force 12: Alarm Sound Time 13: Button Sound Vol 14: Contrast 15: Backlight ON 16: LED Blink Cycle 17: Horizontal Scroll Speed 18: Operation Panel Timeout 19: Language 20: Prioritize Panel Settings 24: Ope. Panel Initialization
Cleaning the scanner	You can clean the scanner by using materials such as the Cleaning Sheet. For more details, refer to "Chapter 6 Daily Care" (page 121).	21: Cleaning

Operation	Description	Setting Item
Test print for Imprinter	You can run a test print when the imprinter is installed. For more details, refer to the “fi-680PRF/ PRB Imprinter Operator's Guide”.	22: Print Test
Checking and resetting the consumables/ cleaning counter	You can check the replacement cycle of the consumables and the total page count on the maintenance parts. Also use it to reset the counter when you have replaced the consumables or performed cleaning. For more details, refer to "Checking and resetting counters" (page 68).	23: Show/Clear Counters
Checking the number of sheets scanned	Compare the number of sheets scanned in Doc Counting Mode and Doc Count Check Mode. For more details, refer to "Checking the number of sheets scanned" (page 70).	25: Doc Counting Mode

Operation	Description	Setting Item
Checking the information	appears when a message for replacing consumables/ cleaning/replacing maintenance parts/ regular maintenance is displayed. Read the message and take measures accordingly. For more details about settings, refer to "Checking the information" (page 72).	Information

■Operational settings



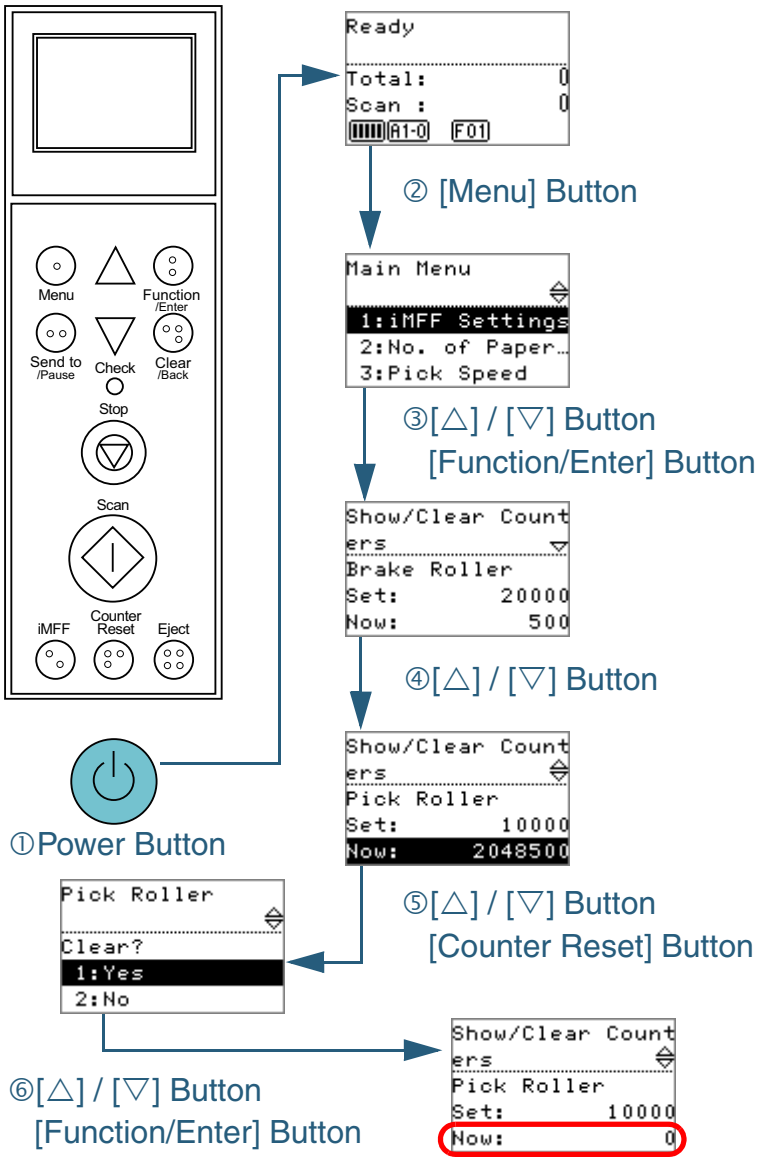
1 Press the power button on the front of the scanner.
➪ [Ready] is displayed on the LCD.

2 Press the [Menu] button.
➪ [Main Menu] is displayed on the LCD.

3 Press the [△] or [▽] button and select a setting item, then press the [Function/Enter] button to confirm.
For more details about the setting items, refer to "Items Configurable in the Main Menu" (page 74).
➪ The selected item is displayed on the LCD.

4 Press the [△] or [▽] button and select a parameter, then press the [Function/Enter] button to confirm.
For more details about the setting parameters, refer to "Items Configurable in the Main Menu" (page 74).
➪ If [Main Menu] is displayed on the LCD, it indicates that the setup has been completed.
If the LCD displays a setting item, repeat step 4 until it shows the [Main Menu] screen.

■Checking and resetting counters



1 Press the power button on the front of the scanner.
⇨ [Ready] is displayed on the LCD.

2 Press the [Menu] button.
⇨ [Main Menu] is displayed on the LCD.

3 Press the [△] or [▽] button and select [23: Show/Clear Counters], then press the [Function/Enter] button to confirm.
⇨ [Show/Clear Counters] is displayed on the LCD.

4 Press the [△] or [▽] button and check the counter.
Counters are highlighted when consumable replacement, maintenance part replacement, or cleaning is required.
The counter will appear highlighted when:

- The page count after replacing the consumable reaches 95% of the value configured in "Specifying the Cycle to Replace Consumables [Life Counter Alarm Setting]" (page 188) in the Software Operation Panel. (For brake roller/pick roller/separator roller counters)
- The scanner determines that the condition of the roller has exceeded the threshold that can be corrected, by monitoring the wear on the roller. (For assist roller counter)
- The page count after cleaning reaches 100% of the value configured in "Specifying the Cycle to Clean the Scanner [Cleaning Cycle]" (page 187) in the Software Operation Panel. (Cleaning counter)
- The amount of remaining ink reaches below 33%. This is only displayed when the imprinter is installed. (For [Ink Level: Front] / [Ink Level: Back])

5 After replacing the consumables or cleaning, select the highlighted counter with the [△] or [▽] button, and press the [Counter Reset] button.

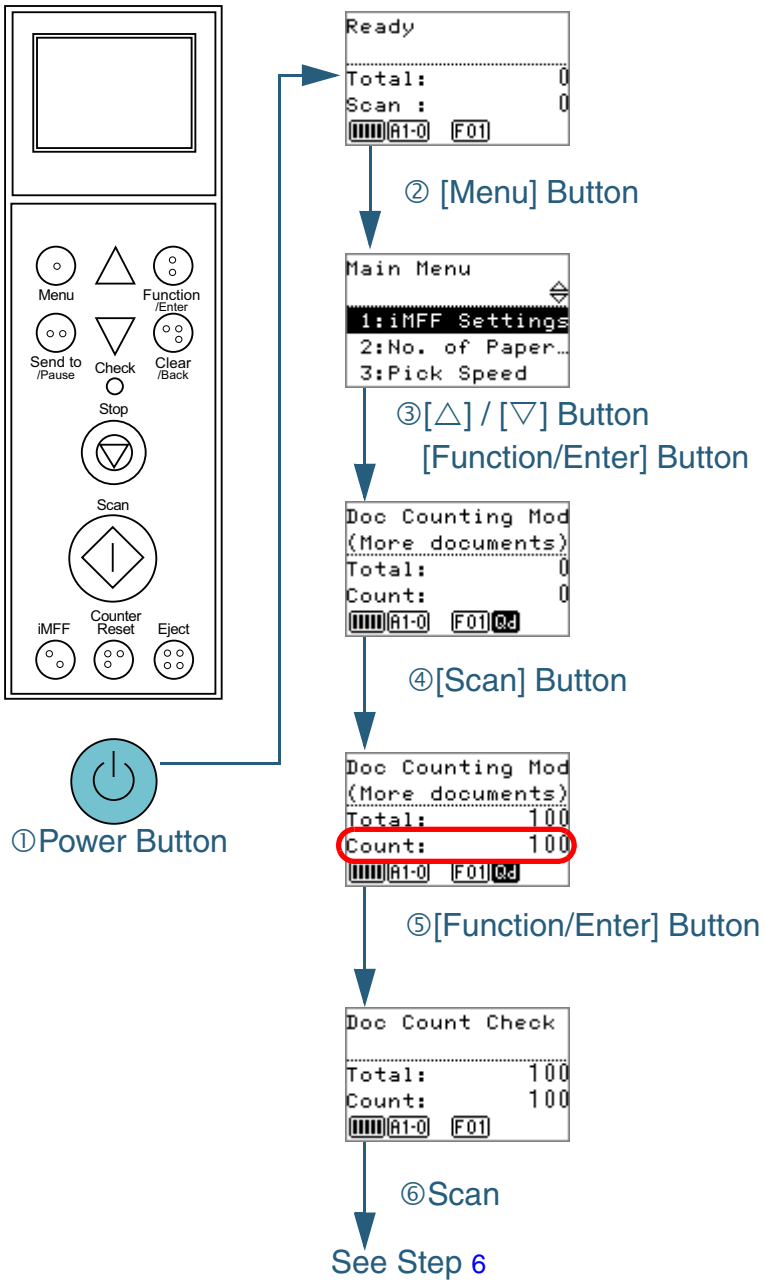
⇨ A message appears to confirm that you want to clear the counter.

> The assist roller counter cannot be cleared. It requires a service engineer to clear the counter.
> For more information, contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

6 Select [1: Yes] by the [△] or [▽] button, and press the [Function/Enter] button to confirm.

⇨ The counter value will be reset to 0.
For ink level, the value will be set to 100.

■Checking the number of sheets scanned



1 Press the power button on the front of the scanner.
➪ [Ready] is displayed on the LCD.

2 Press the [Menu] button.
➪ [Main Menu] is displayed on the LCD.

3 Press the [△] or [▽] button and select [25: Doc Counting Mode], then press the [Function/Enter] button to confirm.
➪ [Doc Counting Mode (More documents)] is displayed on the LCD.

4 Load the documents on the hopper and press the [Scan] button.
100 sheets will be loaded as an example here.
➪ Scanning starts and [Count] will display "100".

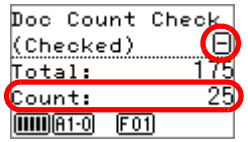
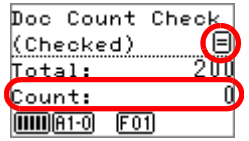
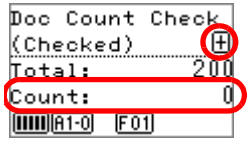
> Documents may not be counted correctly if a multifeed occurs during scanning.
> You can switch whether to enable multifeed detection by pressing the [Eject] button. For more details, refer to " About the Indicators" (page 64).

5 Press the [Function/Enter] button to confirm.
➪ [Doc Count Check Mode] is displayed on the LCD.

6 Load the documents on the hopper, start up a scanning application, and perform a scan.

For information about the scanning procedure in ScandAll PRO, refer to "ScandAll PRO V2.0 User's Guide".

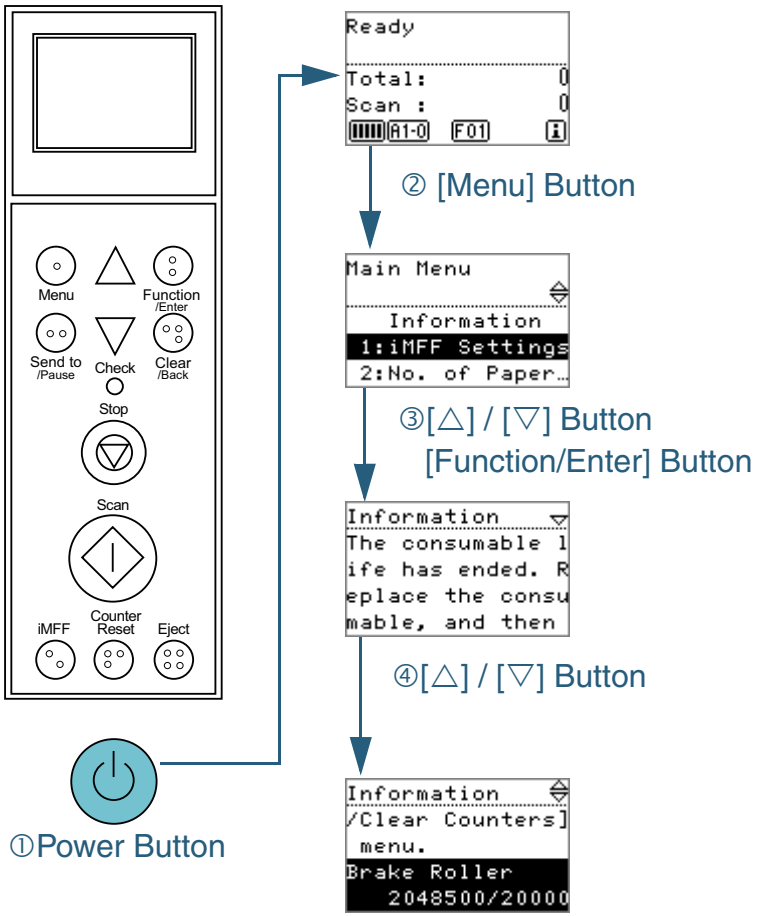
⇨ Depending on the number of sheets scanned, it will be displayed as follows:

Sheets	Display	Description
75 sheets		Since the count has been set to 100 in step 4, it is -25 sheets. [-] appears in the top right and [Count] indicates “25”. If you load additional documents at this point, you can scan up to 25 sheets.
100 sheets		Since the count has been set to 100 in step 4, it is +/- 0. [=] appears in the top right and [Count] indicates “0”.
110 sheets		Since the count has been set to 100 in step 4, it is +10 sheets. [+] appears in the top right and [Count] indicates “0”. Scanning stops once 100 sheets have been scanned.

- Documents may not be counted correctly if a multifeed occurs during scanning.
- In the following cases, the scanning returns to normal from Doc Count Check mode:
  - When you only scan the specified pages (selecting [Scan the specified number of pages] in [Scan Settings] of ScandAll PRO)
  - When you scan using a Job Separator

- When you press the [Counter Reset] button, the screen returns to [Doc Count Check Mode] in step 5.
- When you press the [Stop] button, it exits [Doc Count Check Mode] and returns to the [Ready] screen.

■Checking the information



1 Press the power button on the front of the scanner.
⇨ [Ready] is displayed on the LCD.

2 Press the [Menu] button.
⇨ [Main Menu] is displayed on the LCD.

3 Press the [△] or [▽] button and select [Information], then press the [Function/Enter] button to confirm.
⇨ [Information] is displayed on the LCD.

> [Information] can be selected only when there is a message for replacing consumables/cleaning/replacing maintenance parts/regular maintenance.

4 Press the [△] or [▽] button to check the contents of the information.
You can check the messages for replacing consumables/cleaning/replacing maintenance parts/regular maintenance.

When the message prompts replacing consumables/maintenance parts or cleaning, the corresponding counter that requires consumable replacement/maintenance part replacement/cleaning is highlighted.
Counters will appear highlighted when:

- The page count after replacing the consumable reaches 95% of the value configured in "Specifying the Cycle to Replace Consumables [Life Counter Alarm Setting]" (page 188) in the Software Operation Panel. (For brake roller/pick roller/separator roller counters)
- The scanner determines that the condition of the roller has exceeded the threshold that can be corrected, by monitoring the wear on the roller. (For assist roller counter)
- The page count after cleaning reaches 100% of the value configured in "Specifying the Cycle to Clean the Scanner [Cleaning Cycle]" (page 187) in the Software Operation Panel. (Cleaning counter)
- The amount of remaining ink reaches below 33%. This is only displayed when the imprinter is installed. (For [Ink Level: Front] / [Ink Level: Back]

5 Take measures according to the contents of [Information].

Follow the instructions in the message if it prompts consumable replacement/cleaning/maintenance part replacement.

For information on how to replace consumables, refer to the following:

- Pick Roller "7.2 Replacing the Pick Roller" (page 135)
- Separator Roller "7.3 Replacing the Separator Roller" (page 137)
- Brake Roller "7.4 Replacing the Brake Roller" (page 140)

For details about cleaning, refer to "Chapter 6 Daily Care" (page 121).

Maintenance parts (assist roller) require a service engineer to perform replacement. For more information, contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

If the message prompts regular maintenance, please have the scanner checked by a service engineer for regular maintenance/inspection. For more information, contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

Items Configurable in the Main Menu

Item	Description	Setting/Value	Factory Default
		- : No settings/values	
1: iMFF Setting	When there is paper of the same size attached to a designated location on the page, you can have the scanner memorize the location of the attachment and not detect the same pattern as multifeed. Note that you need to specify [Detect by overlap (Ultrasonic)] in either the scanner driver's setup dialog box or the multifeed detection setting in "Specifying a multifeed detection method [Multifeed]" (page 210) beforehand. By selecting [4: Clear pattern], you can clear the overlapping patterns (length, location) that were previously memorized in Auto mode. It can also be configured from the Software Operation Panel.	1: Manual mode 2: Auto mode 1 3: Auto mode 2 4: Clear pattern	1: Manual mode
2: No. of Paper Feed Retries	Used to change the number of paper feeding retries (when the document is not picked properly). It can also be configured from the Software Operation Panel.	1 to 12 (times)	3
3: Pick Speed	When you experience frequent multifeeds and paper jams, the symptom may be improved by slowing down the speed in which documents are picked (fed). It can also be configured from the Software Operation Panel.	1: Normal 2: Slow	1: Normal
4: Soft Pick Setting	When you experience pick errors from the separator roller slipping on the paper, or paper jams from scanning thin papers of small widths, the symptom may be improved by bringing down the pick roller unit and keeping the unit at the lower position (disabling the Soft Pick Setting). It can also be configured from the Software Operation Panel.	1: Disable 2: Enable	2: Enable

Item	Description	Setting/Value	Factory Default
		- : No settings/values	
5: Manual Feed Timeout	Specify the waiting time to clear Manual Feed mode. It can also be configured from the Software Operation Panel.	SCSI or USB Connector 1: 5, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 180, 240, 300, 360, 420, 480, 540, 600, 900, 1200, 1500, 1800, 1999 (seconds) SCSI or USB Connector 2: 5, 10, 20, 30 (seconds)	10
6: Paper Protection	Select whether to enable or disable Paper Protection. Enabling this setting reduces the risk of having the documents damaged upon feeding errors, by stopping the scan when the scanner detects a document that is unusually warped. You can specify the level of sensitivity to detect an abnormal feeding of documents when Paper Protection is enabled. Documents are deformed (e.g. warped, bent, creased) when they are not being fed by the rollers properly. To detect such a symptom and stop the scan, select [1: Low] to only detect documents that are highly deformed, and [3: High] to also detect documents that are slightly deformed. Paper Protection is disabled in Manual Feed mode. Enable/Disable can also be configured from the scanner driver's setup dialog box or the Software Operation Panel. In this case, priority is given to the scanner driver setting unless you have prioritized the operator panel setting. Sensitivity can also be configured from the Software Operation Panel. Priority is given to the scanner driver setting unless you have prioritized the operator panel setting.	1: Enable 2: Disable Sensitivity: 1: Low 2: Normal 3: High	2: Disable Sensitivity: 2: Normal

Item	Description	Setting/Value	Factory Default
		- : No settings/values	
7: MF Quick Change	Enables you to switch whether or not to detect multifeed by a push of a button. Priority is given to the driver setting when [1: Disable] is selected. When [2: Enable(Detect)] or [3: Enable(Ignore)] is selected, it switches between detecting/not detecting multifeed every time the [Eject] button is pressed. It can be switched during scanning. For [2: Enable(Detect], it detects multifeed by default and multifeed detection is performed according to the driver setting. For [3: Enable(Ignore)], it does not detect multifeed by default and this setting is given priority over the driver setting.	1: Disable 2: Enable(Detect) 3: Enable(Ignore)	1: Disable
8: Alarm Volume	Specify whether or not to ring an alarm when an error such as multifeed or paper jam occur. It can also be configured from the Software Operation Panel.	1: OFF 2: Low 3: High	1: OFF
9: Stacker Positioning	Adjust the stacker position. You can set the stacker at certain heights.	1: Movable 2: Fixed	(*1)
10: Hopper Level	Change the hopper level during standby. Selecting [1: Manual (Continuous)] switches the scanner to Manual Feed mode (Continuous Feed mode). The hopper level cannot be changed in Manual Feed mode (Single Feed mode). Remove all documents from the hopper when you configure this item. The hopper is set to [4: Lower] when you clear manual feeding (continuous).	1: Manual (Continuous) 2: Upper 3: Middle 4: Lower	(*2)
11: Paper Separation Force	When you experience frequent multifeeds, pick errors or paper jams, take measures by adjusting the force to separate the papers. Keep the default setting for normal use. For more details, refer to "1.9 Adjusting the Paper Separation Force" (page 26).	Low High ■□□□□ ■■□□□ ■■■□□ ■■■■□ ■■■■■	■■■□□
12: Alarm Sound Time	Specify the duration to ring the alarm in when errors such as multifeed and paper jam occur.	0.5, 1, 1.5, 2.0, 2.5 (seconds)	2.0

Item	Description	Setting/Value	Factory Default
		- : No settings/values	
13: Button Sound Vol	Specify whether or not to make a sound when a button on the operator panel is pressed.	1: OFF 2: Low 3: High (ring time fixed at 0.01 second)	1: OFF
14: Contrast	Specify the contrast for the LCD on the operator panel.	Weak Strong ■□□□□ ■■□□□ ■■■□□ ■■■■□ ■■■■■	■■■□□
15: Backlight ON	Specify the duration for which the backlight is lit ON. Until initialization is complete after turning the power on, this item operates in [ON] regardless of the setting configured.	OFF, ON, 5, 10, 20, 30, 40, 50, 60, 90, 120, 150, 180, 210, 240, 270, 300 (seconds)	ON
16: LED Blink Cycle	Specify the interval in which the Check LED flashes when (for Information) is displayed on the LCD.	0.5, 1.0, 1.5, 2.0, 2.5 (seconds)	2.0
17: Horizontal Scroll Speed	Specify the speed in which the display is horizontally scrolled. The displayed item is scrolled horizontally when the text does not fit in the LCD.	1: Fast 2: Normal 3: Slow 4: OFF	2: Normal
18: Operation Panel Timeout	Specify the time to return to the [Ready] screen from [Hopper Level] or [Paper Separation Force]. Note that this option is only available when you display [Hopper Level] or [Paper Separation Force] from the [Ready] screen by using a shortcut key. To display [Hopper Level] by shortcut key, press the [Eject] button and either the [△] or [▽] button at the same time when [Ready] is displayed. Note that the [Hopper Level] screen is not displayed unless the two buttons are pressed simultaneously. To display the [Paper Separation Force] screen by shortcut key, press the [△] or [▽] button in the [Ready] screen.	OFF, 5 to 9 (seconds)	7

Item	Description	Setting/Value	Factory Default
		- : No settings/values	
19: Language	Specify the language in which data is displayed.	1: Japanese 2: English 3: French 4: German 5: Italian 6: Spanish 7: Russian 8: Chinese	2: English
20: Prioritize Panel Settings	Prioritize the operator panel setting for Paper Protection. When [1: Paper Protection] is selected, the Paper Protection setting of the operator panel is prioritized. When [2: Clear] is selected, the Paper Protection setting is no longer prioritized.	1: Paper Protection 2: Clear	2: Clear
21: Cleaning	Use this setting when you clean the scanner. For more details, refer to "Chapter 6 Daily Care" (page 121).	-	-

Item	Description	Setting/Value	Factory Default
		- : No settings/values	
22: Test Print	Use this option to run a test print when the Imprinter is installed. For more details, refer to the “fi-680PRF/PRB Imprinter Operator's Guide”.	No. of sheets scanned: 1: Single sheet only 2: Multiple sheets Print: (*4) 1: Front Side 2: Back Side Print Pattern: 1: (L)ABCDEFGHIJKLMNOPQRSTUVWXYZ[¥]^_`00000000 2: (L)abcdefghijklmnopqrstuvwxyz{|}~00000000 3: (L)!”#$%&’()*+,-./0123456789:;<=>?@00000000 4: (P)ABCDEFGHIJKLMNOPQRSTUVWXYZ[¥]^_`00000000 5: (P)abcdefghijklmnopqrstuvwxyz{|}~00000000 6: (P)!”#$%&’()*+,-./0123456789:;<=>?@00000000 Test Print: 1: Yes 2: No	(*3)
23: Show/Clear Counters	Check the replacement cycle of the consumables and the total page count of the maintenance parts. Also use it to reset the counter when you have replaced the consumables or performed cleaning.	Brake Roller / Pick Roller / Separator Roller / Assist Roller / Cleaning	0
		Ink Level:Front / Ink Level:Back (only when imprinter is installed)	Only displayed when imprinter is installed
24: Ope. Panel Initialization	Initialize the settings of the operator panel, except for the language setting and any items without a factory default setting.	1: Yes 2: No	(*5)
25: Doc Counting Mode	Compare the number of sheets scanned in Doc Counting Mode and Doc Count Check Mode.	-	-

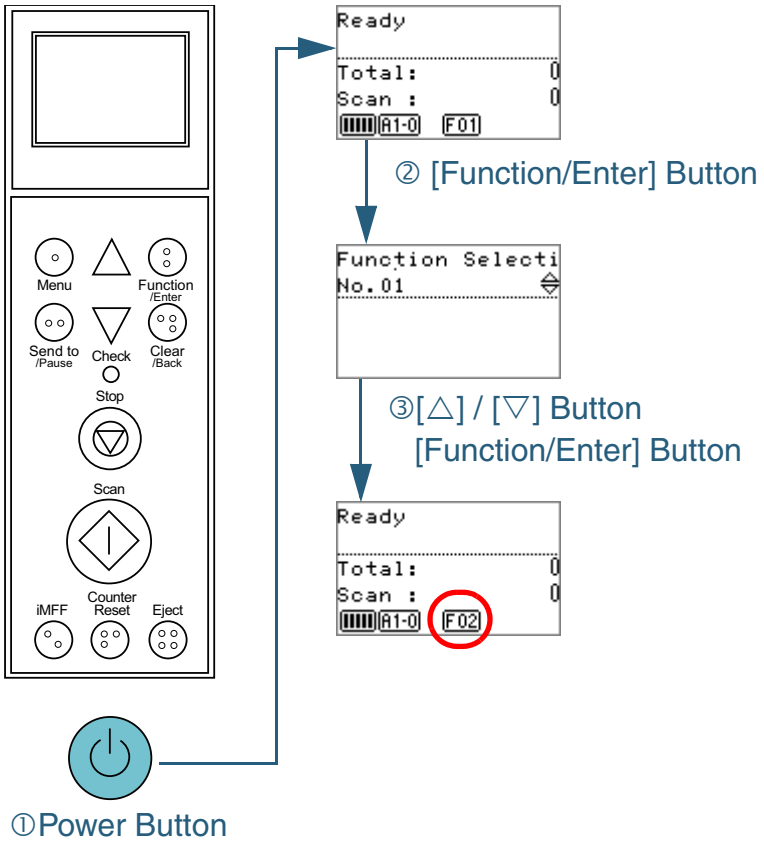
Item	Description	Setting/Value	Factory Default
		- : No settings/values	
Information	[Information] appears as an item in [Main Menu] only when is displayed on the LCD.	Message for replacing consumables / cleaning / replacing maintenance parts / regular maintenance	Only displayed when there is information

*1: Although there is no factory default setting, it is set to [1: Movable] when you turn on the power. Therefore, the setting does not change even when you initialize the operator panel.
*2: Although there is no factory default setting, it is set to [4: Lower] when you turn on the power. Therefore, the setting does not change even when you initialize the operator panel.
*3: Although there is no factory default setting, the settings are configured as follows when you turn on the power: [2: Multiple sheets] for [No. of sheets scanned], [1: Front Side] for [Print], [1: (L)ABCDEFGHIJKLMNOPQRSTUVWXYZ[|]^_'00000000] for [Print Pattern], and [1: Yes] for [Test Print]. Therefore, the settings do not change even when you initialize the operator panel.
*4: [Print: 1: Front Side / 2: Back Side] does not appear unless both Front-Side and Back-Side Imprinters are installed.
*5: Although there is no factory default setting, it is set to [2: No] when you turn on the power. Therefore, the setting does not change when you initialize the operator panel.

4.3 Function Selection

This section explains about the Function Selection.
When you press the [Function/Enter] button in the [Ready] screen, [Function Selection] is displayed.
By using Function Selection, you can configure an application to be launched when the [Send to/Pause] button is pressed.

How to Use Function Selection



1 Press the power button on the front of the scanner.
➪ [Ready] is displayed on the LCD. The indicator displays [F01] when the power has just been turned on.

2 Press the [Function/Enter] button.
➪ [Function Selection] is displayed on the LCD.

3 Press the [△] or [▽] button and select a parameter, then press the [Function/Enter] button to confirm.
For more details about the setting parameters, refer to "Item Configurable in Function Selection" (page 82).
➪ The setup is completed when the LCD displays the [Ready] screen.
The configured parameter is shown by the indicator.
In this example, the indicator displays "F02".
Note that No.C indicates that the setting is fixed at the Software Operation Panel. If No.C is selected, the indicator displays "SOP".

Item Configurable in Function Selection

Item	Description	Setting	Factory Default
Function Selection	Configure the application(s) to be launched by the [Send to/ Pause] button. It displays the scanner button events configured in the computer ([Send to 1] to [Send to 50]). For information on how to configure scanner button events, refer to "Using a Button on the Scanner to Start Scanning" (page 113). Note that this item is not available when using Kofax VRS.	No.01 to No.50 / No.C (No.C indicates the Software Operation Panel)	(*1)

*1: Although there is no factory default setting, it is set to [No.01] when you turn on the power. Therefore, the setting does not change even when you initialize the operator panel.

Chapter 5 Various Ways to Scan

This chapter explains how to scan documents in various ways, by using examples of TWAIN started via ScandAll PRO.

5.1 Summary 84
5.2 Scanning Documents of Different Types and Sizes 85
5.3 Advanced Scanning 88
5.4 Configuring Post-Scan Operations and Handling 100
5.5 Customizing the Hardware Settings 113

5.1 Summary

The following lists various ways of scanning documents.

Scanning documents of different types and sizes

- "Scanning Both Sides of a Document" (page 85)
- "Scanning Documents of Different Widths" (page 86)
- "Scanning a Document Longer Than A3 Size" (page 87)

Advanced scanning

- "Excluding Colors from Images (Dropout Color)" (page 88)
- "Skipping Blank Pages" (page 90)
- "Scanning the Image Brighter" (page 92)
- "Removing Punch Holes" (page 94)
- "Feeding Documents Manually" (page 96)

Configuring post-scan operations and handling

- "Automatically Correcting Skewed Document Images" (page 100)
- "Automatically Correcting the Page Orientation" (page 102)
- "Saving Scanned Images in PDF Format" (page 104)
- "Outputting in Multi-Image Mode" (page 108)
- "Automatically Detecting the Document Color (Color/Monochrome)" (page 110)
- "Adjusting the Scanned Image in [Image Adjustment] Dialog Box" (page 112)

Customizing the hardware settings

- "Using a Button on the Scanner to Start Scanning" (page 113)
- "Detecting Multifeed Errors" (page 115)
- "Bypassing Multifeed Detection for a Fixed Format" (page 117)

For information on how to scan documents in the following methods, refer to "ScandAll PRO V2.0 User's Guide".

- Dividing a Multipage Document Using Patch Codes
- Dividing a Multipage Document Using Barcodes
- Specifying the Result of Zone OCR as a File Name
- Specifying the Result of Barcode Recognition as a File Name
- Creating Saving Folders for Each Batch Scan
- Saving Scanned Images from a Batch Scan to Microsoft SharePoint Server
- Restarting a Suspended Batch Scan
- Outputting Indexing Information File and Linking with an Application
- Detecting Errors in the Scanned Document

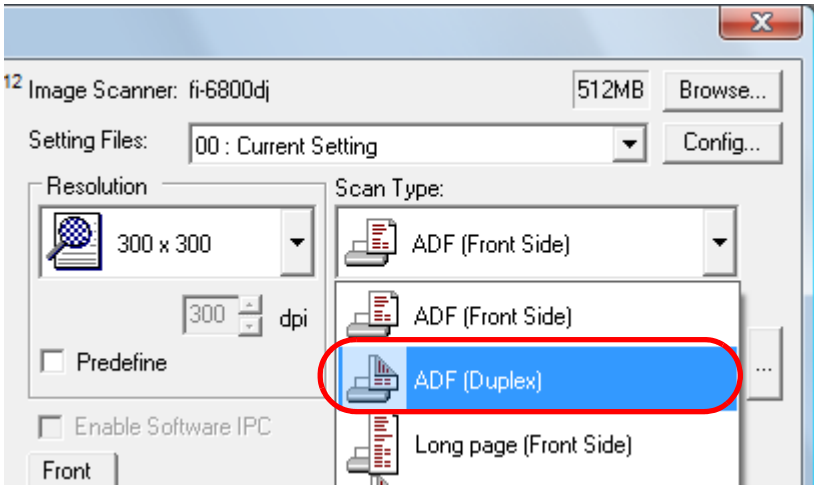
5.2 Scanning Documents of Different Types and Sizes

Scanning Both Sides of a Document

1 Load a document on the hopper.
For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

2 Start up ScandAll PRO and open the [TWAIN Driver (32)] dialog box.
For information on how to display the [TWAIN Driver (32)] dialog box, refer to "ScandAll PRO V2.0 User's Guide".

3 Select [ADF (Duplex)] for [Scan Type].



4 Configure other settings such as [Paper Size].

5 Click the [OK] button.
⇨ The changes are applied.

6 Perform a scan from ScandAll PRO.
For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

Scanning Documents of Different Widths

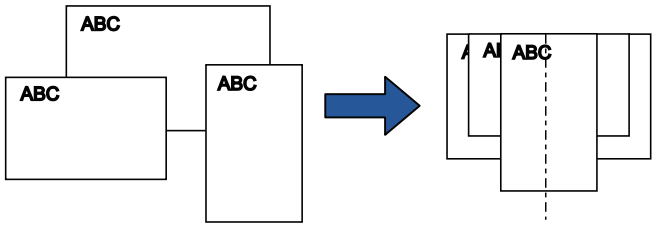
When you scan a batch of documents with different widths, load the documents using the following procedure:

- When you scan documents of different widths at the same time, some of the smaller documents may be skewed or may not be fed into the scanner. Try to scan documents of the same width.
- For more details about the conditions of scanning documents in mixed batches, refer to "Scanning a Mixed Batch of Documents" (page 46).

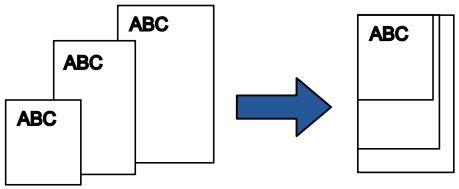
1 To avoid skewed images, select [Automatic Page Size Detection] in [Automatic Size and Skew Detection].
For more details about settings, refer to "Automatically Correcting Skewed Document Images" (page 100).

2 Align the edges of the documents.

- Align by the center



- Align by the side

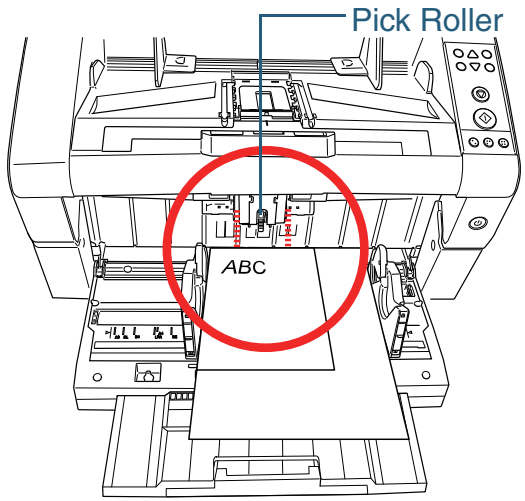


3 Place the documents on the hopper and adjust the hopper side guides to the widest document in the batch.

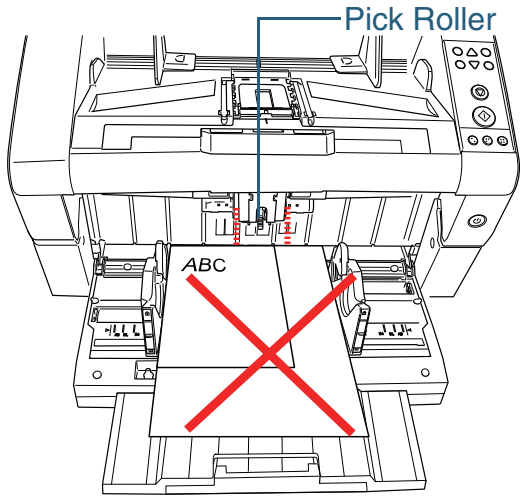
For information on how to load documents on the hopper, refer to "2.1 Loading Documents" (page 34).

Make sure that all documents are placed underneath the pick roller, otherwise the document will not be picked.

- Good example



- Bad example



4 Perform a scan from ScandAll PRO.
For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

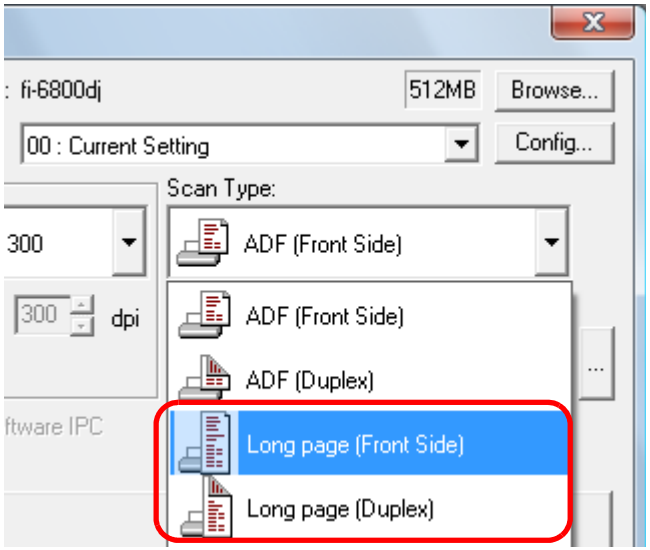
Scanning a Document Longer Than A3 Size

1 Load the document on the hopper.
For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

> To scan documents longer than A3 size, pull out the hopper extension and stacker extension all the way. Also, make sure not to pull up the paper stop.

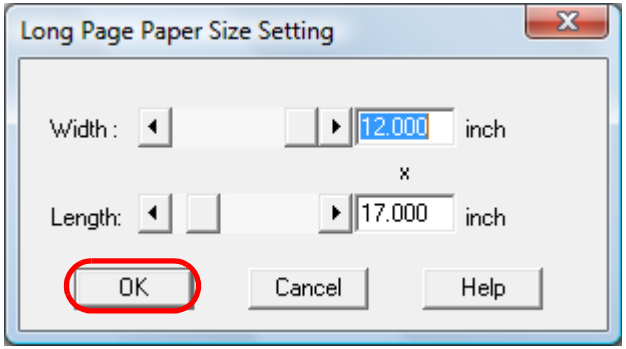
2 Start up ScandAll PRO and open the [TWAIN Driver (32)] dialog box.
For information on how to display the [TWAIN Driver (32)] dialog box, refer to "ScandAll PRO V2.0 User's Guide".

3 In [Scan Type], select [Long page (Front Side)] or [Long page (Duplex)].
Select [Long page (Front Side)] for simplex scanning and [Long page (Duplex)] for duplex scanning.



⇨ [Long Page Paper Size Setting] dialog box appears.

4 Specify the paper size and click the [OK] button.



5 Click the [OK] button.
⇨ The changes are applied.

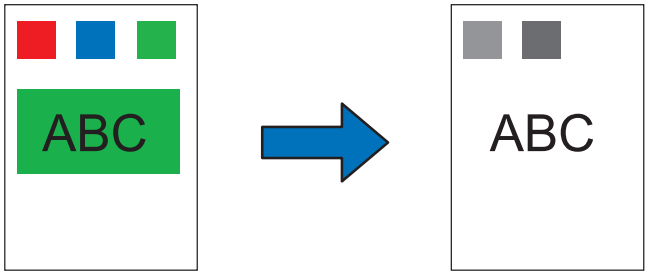
6 Perform a scan from ScandAll PRO.
For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

> - Long page scanning cannot be used with the following functions:
>   - Multi Image Output
>   - Auto Color/Monochrome Detection
> - To scan documents longer than 864 mm (34 in.), set the resolution to 300 dpi or lower.

5.3 Advanced Scanning

Excluding Colors from Images (Dropout Color)

You can select a primary color (green, red, blue) to be removed (dropped out) from the scanned image.
For instance, when you scan a document containing black text with a green background, you can output the image with only the black text.



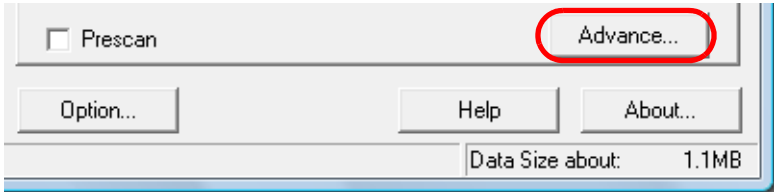
Example: When [Green] is specified for Dropout Color

- Dropout colors can only be specified in black & white or grayscale mode.
- Dropout works best with light (low intensity) colors, and dark colors may not drop out.

1 Load a document on the hopper.
For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

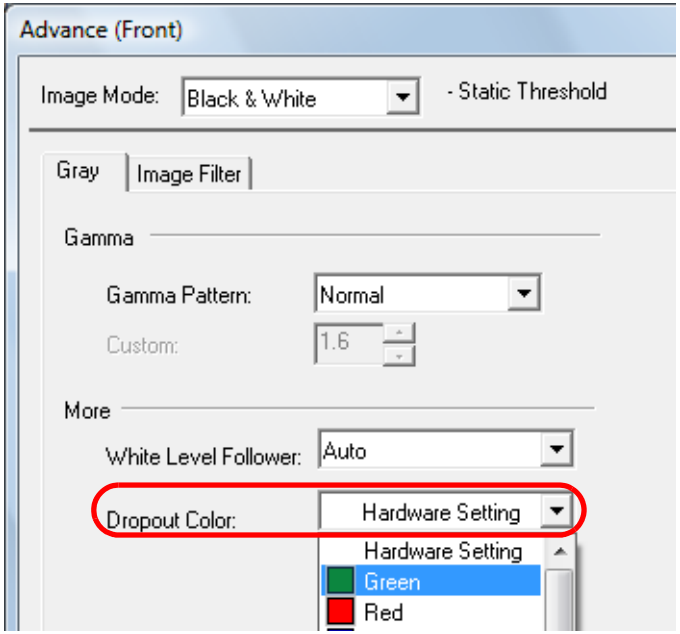
2 Start up ScandAll PRO and open the [TWAIN Driver (32)] dialog box.
For information on how to display the [TWAIN Driver (32)] dialog box, refer to "ScandAll PRO V2.0 User's Guide".

3 Click the [Advance] button.



⇨ The [Advance] dialog box appears.

4 Select a color to drop out in the [Dropout Color] drop-down list under [More].

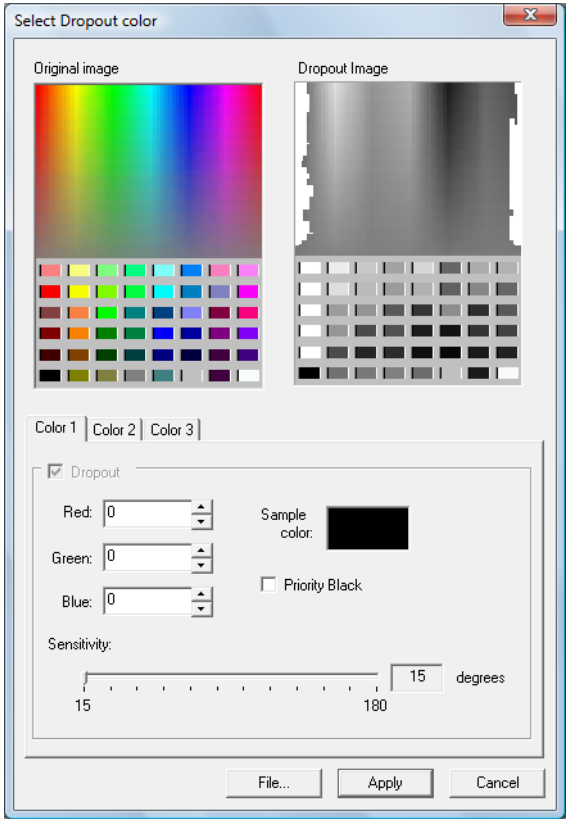


If you select [Hardware Setting], the setting of the Software Operational Panel is enabled.

No color is dropped out when you select [None].

To drop out a specific color, select [Custom], [Custom 2], [Custom 3] or [Custom 4].

When you select [Custom], [Custom 2], [Custom 3] or [Custom 4], the [Select Dropout Color] dialog box is displayed where you can select up to three colors to be dropped out.



- [Original image]
  A sample color palette is displayed. Click to select the color.
- [Dropout image]
  The image after dropping out the color(s) is displayed.
- [Color 1], [Color 2], and [Color 3] tabs
  Specify the color(s) to be dropped out. Up to three colors can be selected at once.
  - [Dropout] check box
    Select this check box in the [Color 2] or [Color 3] tab to specify more than one color to be dropped out.
  - [Red] / [Green] / [Blue]
    Displays the information of the specified dropout color in numerical values. These values can be typed in directly or changed by clicking the [▲] / [▼] button.
  - [Sample color]
    Displays the specified color.
- [Priority Black] check box
  Select this check box when you do not want to drop out the text. This option saves low-intensity colors such as black (generally used for characters) from being dropped out.
- [Sensitivity]
  Specify the allowable range for the selected dropout color.
  Range: 15 to 180 degrees
  The larger the value, the wider the dropped out color range becomes.
- [File] button
  Allows you to view an image file (*.bmp) in the [Original Image] frame and select a dropout color.
- [Apply] button
  Applies the configured settings and closes the dialog box.
- [Cancel] button
  Cancels the configured settings and closes the dialog box.

5 Click the [OK] button.

⇨ It returns to the [TWAIN Driver (32)] dialog box.

6 Click the [OK] button in the [TWAIN Driver (32)] dialog box.

⇨ The settings are saved.

7 Perform a scan from ScandAll PRO.

For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

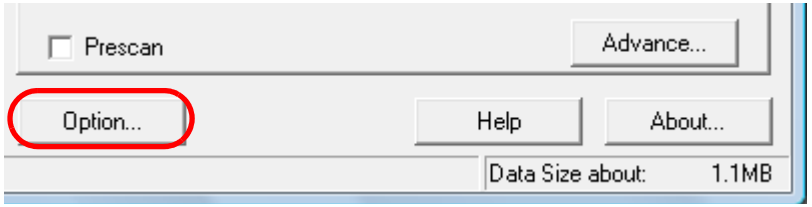
Skipping Blank Pages

Blank pages (black or white) in the documents can be detected and automatically removed during scanning.
For instance, when you scan a mixed batch of double-sided and single-sided documents in duplex scanning mode, it generates the images without the back sides of the single-sided documents (blank pages).

1 Load documents on the hopper.
For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

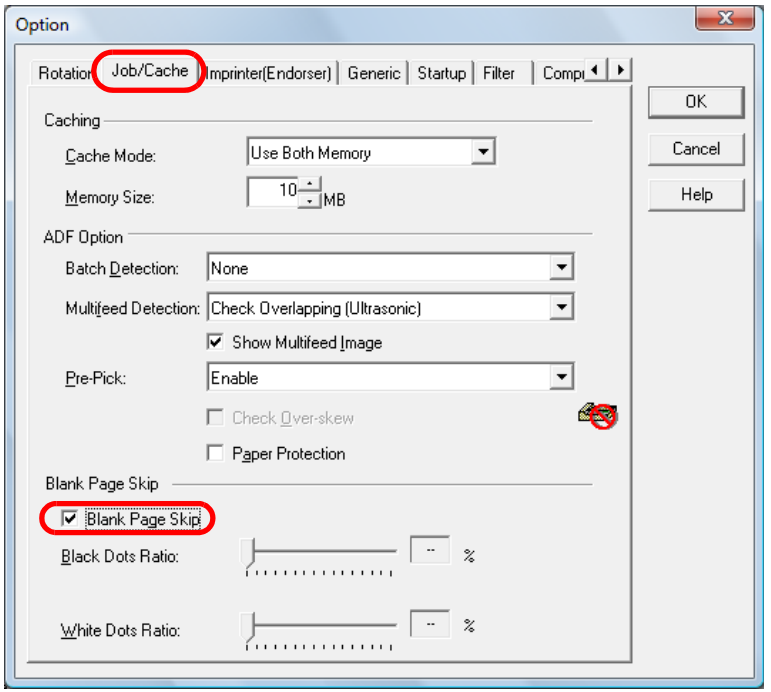
2 Start up ScandAll PRO and open the [TWAIN Driver (32)] dialog box.
For information on how to display the [TWAIN Driver (32)] dialog box, refer to "ScandAll PRO V2.0 User's Guide".

3 Click the [Option] button.



⇨ The [Option] dialog box appears.

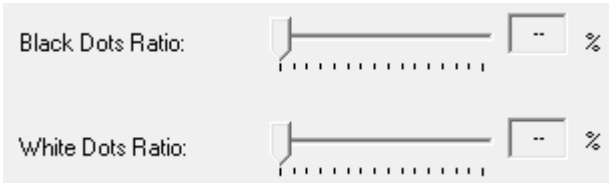
4 Click the [Job/Cache] tab and clear the [Blank Page Skip] check box.



When this check box is selected, the cache mode automatically switches to [Use Both Memory].

5 Use the slide bars of [Blank Page Skip] to adjust the ratios to skip blank pages by.

- Binary/Halftone mode



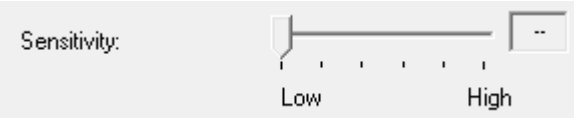
Adjust [Black Dots Ratio] for white pages and [White Dots Ratio] for black pages.

The value on the right side of the slide bar indicates the ratio of image noise (*1), and is recognized as blank when the scanned image contains a smaller value.

The value ranges from 0.2 to 3.0% (in increments of 0.2) or OFF (--).

*1: The ratio of black dots to the scan area (for white papers).

- Color/Grayscale mode



Specify a sensitivity level from 1 to 5 for skipping blank (white) pages. The larger the value is set, the more likely for the pages to be detected as blank.

6 Click the [OK] button.

⇨ It returns to the [TWAIN Driver (32)] dialog box.

7 Click the [OK] button in the [TWAIN Driver (32)] dialog box.

⇨ The settings are saved.

8 Perform a scan from ScandAll PRO.

For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

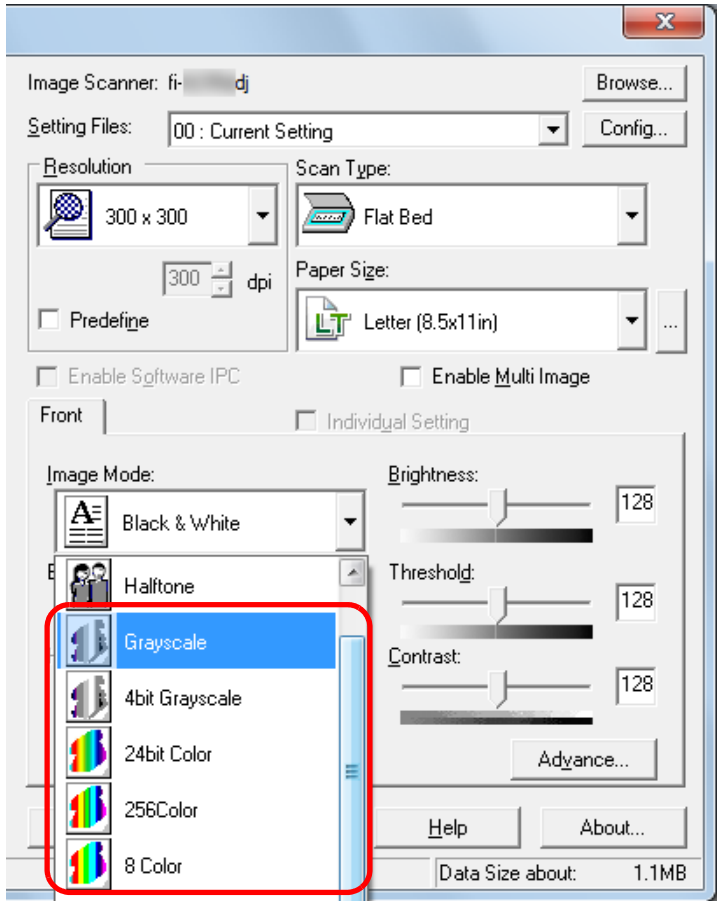
Scanning the Image Brighter

The brightness of the scanned image can be increased for scanning in grayscale or color.

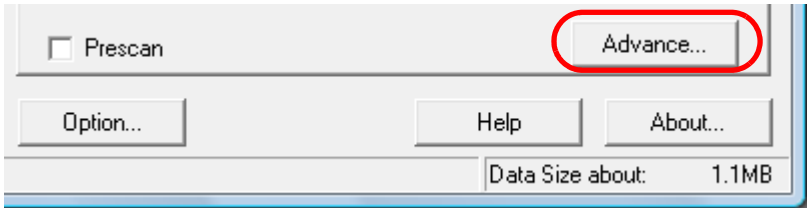
1 Load documents on the hopper.
For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

2 Start up ScandAll PRO and open the [TWAIN Driver (32)] dialog box.
For information on how to display the [TWAIN Driver (32)] dialog box, refer to "ScandAll PRO V2.0 User's Guide".

3 Select grayscale or color in [Image Mode].

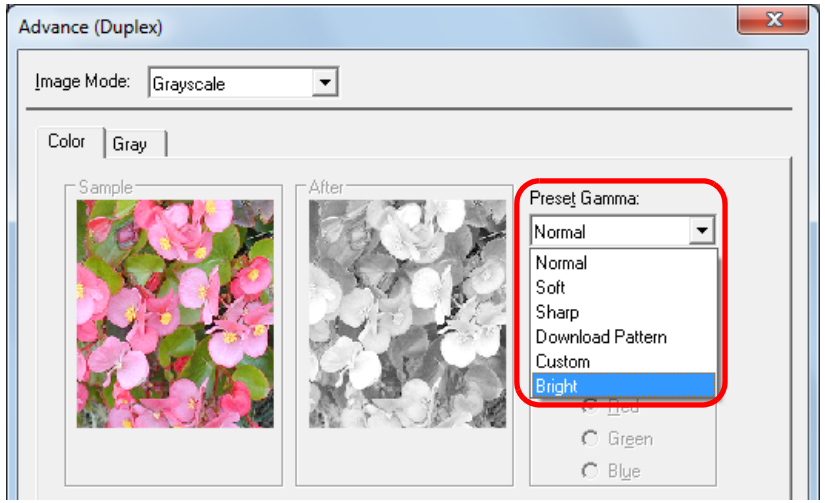


4 Click the [Advance] button.



⇨ The [Advance] dialog box appears.

5 Click the [Color] tab, and then select [Bright] in [Preset Gamma].



6 Click the [OK] button.

➪ It returns to the [TWAIN Driver (32)] dialog box.

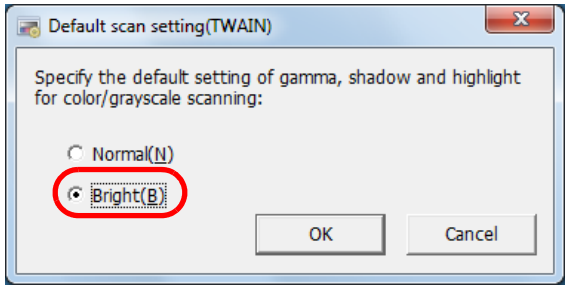
7 In the [TWAIN Driver (32)] dialog box, click the [OK] button.

➪ The settings are saved.

8 Perform a scan from ScandAll PRO.

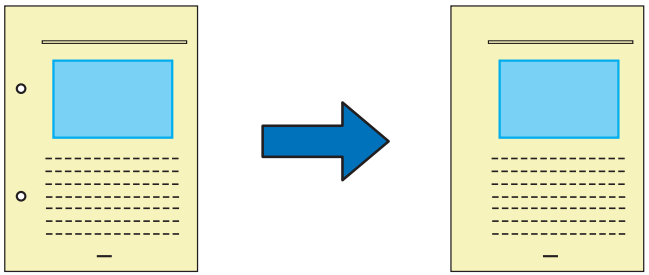
For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

When using applications other than ScandAll PRO, you can also increase the default brightness of the TWAIN driver. Select [Tools] → [FtSwtGmm] → [Twain] in the Setup DVD-ROM and double-click "FtSwtGmm.exe", and then select [Bright) in the [Default scan setting (TWAIN)] dialog box.



Removing Punch Holes

You can remove punch holes from the output scanned image.



Original Output image

Punch holes cannot be removed when:

- The holes are not aligned along the edge of the document
- The size and gaps between the holes vary
- The document is not rectangular
- The document has a dark background color
- There are characters/pictures over the edge or the holes
- [Automatic Page Size Detection] is specified and the scanned document is larger than the specified paper size
- The size of the scanned document is not as specified in [Paper Size] while [Black Background] is selected.

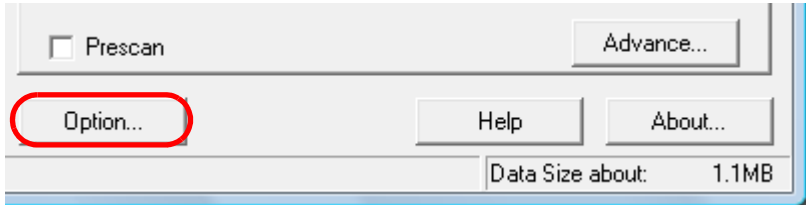
1 Load a document on the hopper.

For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

2 Start up ScandAll PRO and open the [TWAIN Driver (32)] dialog box.

For information on how to display the [TWAIN Driver (32)] dialog box, refer to "ScandAll PRO V2.0 User's Guide".

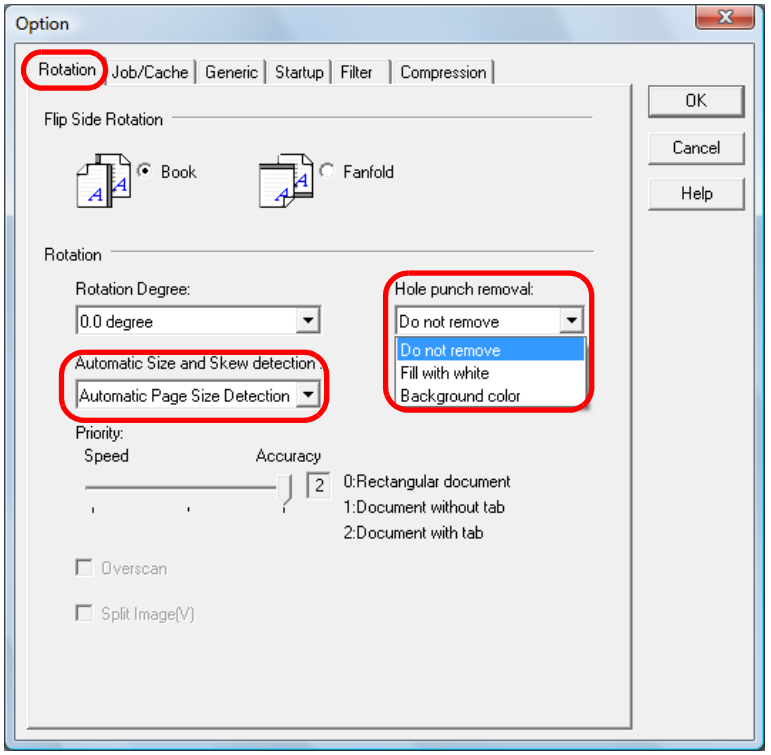
3 Click the [Option] button.



⇨ The [Option] dialog box appears.

4 Click the [Rotation] tab and select [Automatic Page Size Detection] or [Black Background] in the [Automatic Size and Skew detection] drop-down list.

The Hole Punch Removal function is disabled when a setting other than [Automatic Page Size Detection] or [Black Background] is specified.



5 Select [Fill with white] or [Background color] under [Hole punch removal].
Select [Background color] when scanning a color document. If [Fill with white] is selected, the punch holes will appear as if they are filled with white squares.

6 Click the [OK] button.
⇨ It returns to the [TWAIN Driver (32)] dialog box.

7 Click the [OK] button in the [TWAIN Driver (32)] dialog box.
⇨ The settings are saved.

8 Perform a scan from ScandAll PRO.
For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

With some types of documents, the characters or graphics may be falsely detected as punch holes and filled with a color, or the punch holes may not be filled at all. In such cases, select [Automatic Page Size Detection] and specify "2" for [Priority] to improve the accuracy of hole punch removal.

Feeding Documents Manually

Besides the normal automatic document feeding in which you load a batch of documents on the hopper and scan them one by one, you can also use the “Manual Feed mode” where you manually feed each sheet and perform scanning.
Normally, in automatic feeding, the scanner stops scanning once all the loaded documents are scanned.
In manual feeding, the scanner waits for the next sheet to be set within a specified time. It continues scanning if an additional document is loaded within the specified time, or stops scanning if no document is loaded.
With this option, you can perform scanning as you check the documents one by one.
Manual feeding is effective for:

- Scanning as you check the contents of each sheet
- Scanning documents that cause multifeed or paper jam when they are loaded together
- Continuously scanning documents such as clippings of magazines and newspapers which cannot be loaded together at once

- Paper Protection is disabled in Manual Feed mode.
- Pause function ([Send to/Pause] button) is disabled during manual feeding.

There are two modes in manual feeding.

Single Feed mode

Only one sheet is manually fed and scanned.

- Suitable for scanning thick papers, envelopes and folded papers that are difficult to scan by automatic feeding (In case of folded paper, make the folding line as the leading edge).
- Reduces the pressure applied on the document when it enters the ADF (because the pick roller does not touch the document).
- Used to accurately feed and scan one sheet of document.
- No paper separation force is applied regardless of the paper separation force setting (five levels). Therefore, this mode enables you to scan documents such as envelopes which cause paper jams in automatic document feeding.

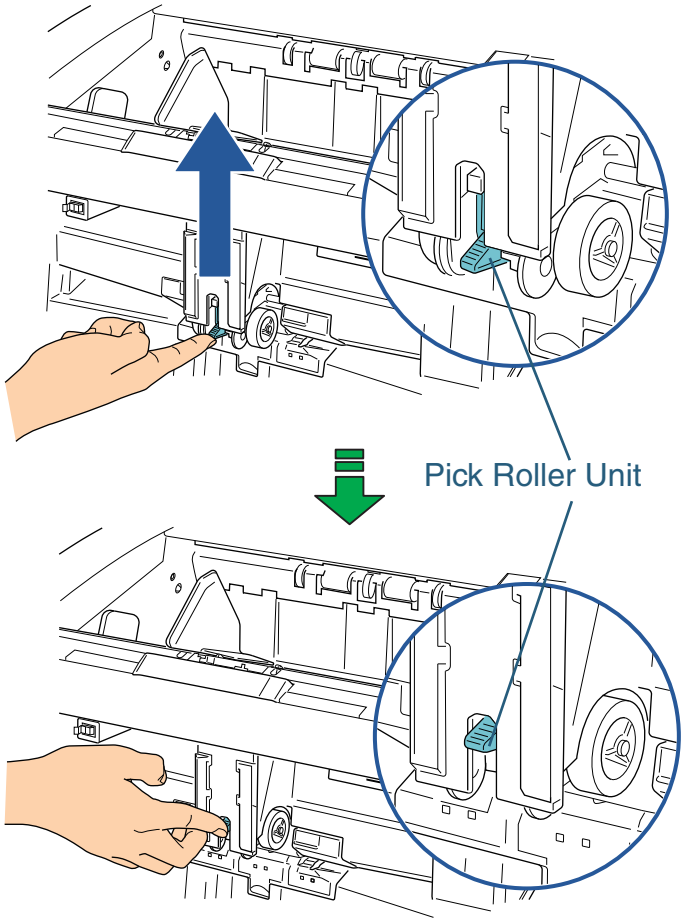
Continuous Feed mode

Multiple sheets of document are manually fed one at a time and continuously scanned.

- Documents are scanned one by one even if multiple sheets are mistakenly fed.
- When you scan more than one sheet, you can check every sheet as you scan.
- Used to accurately feed and scan multiple sheets of documents.
- The paper separation force setting (five levels) is enabled as with scanning in automatic document feeding. Adjust the paper separation force when multifeeds, pick errors or paper jams occur frequently.

Scanning in Single Feed mode

1 Lift up the pick roller unit.
Push up the tab in the middle with your finger.



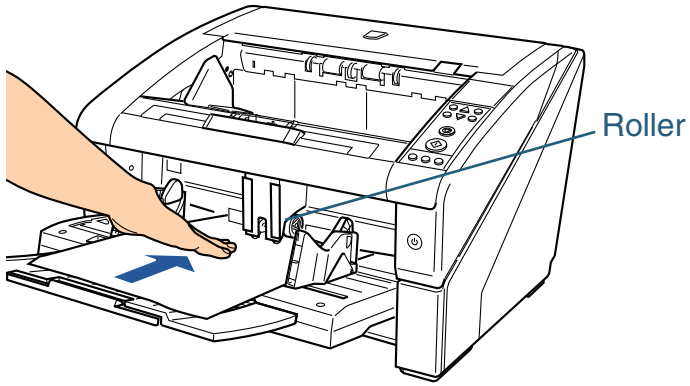
⇨ The pick roller unit will click into place.
The hopper moves up to the feeding position.

- Make sure that there is no document left on the hopper.
- Be careful not to have your fingers or anything caught when the hopper moves up.

2 Load a document on the hopper with the front side (scanning side) facing up.
Make sure not to place the document all the way in.

3 Perform a scan from ScandAll PRO.
For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

4 Insert the document until the top edge touches the rollers on the inside.

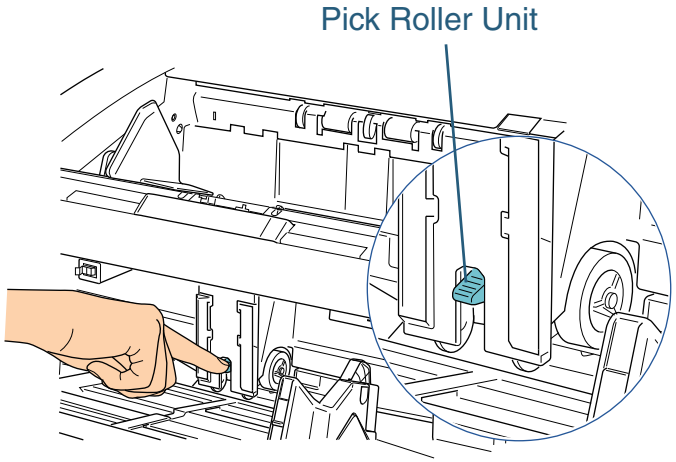


⇨ The document is picked, scanned, then ejected onto the stacker.
After the scan, the scanner waits for the next sheet to be fed for the time specified in the Software Operation Panel.

Let go of the document as soon as you confirm that the document is being fed by the rollers.

5 Repeat step 4 until all the documents are scanned.

- Scanning can be stopped immediately by pressing the [Counter Reset] button on the operator panel.
- Scanning stops when no document is loaded on the hopper after the time specified in the Software Operation Panel.
- The scanner waits for the period of manual feed timeout even when there is no document left on the hopper.
- The timeout period for manual feeding can be configured on the operator panel or in the Software Operation Panel.
- To release Manual Feed mode, bring the pick roller unit back down to its original position. Put your finger on the tab in the center and push it down.



■ Scanning in Continuous Feed mode

1 Open the hopper if it is closed.
For information on how to open the hopper, refer to "1.4 Opening/Closing the Hopper" (page 19).

2 Configure by selecting [Main Menu] → [10: Hopper Level] → [1: Manual (Continuous)] on the operator panel.
For more details about the setting, refer to "4.2 Main Menu" (page 65).

⇨ The hopper moves up to the feeding position.

- Make sure that there is no document left on the hopper.
- Be careful not to have your fingers or anything else caught when the hopper moves up.

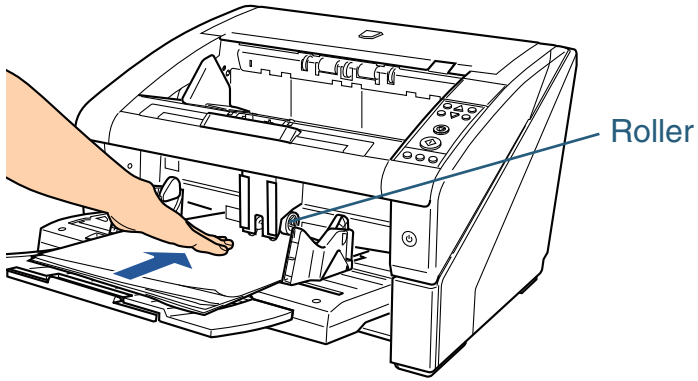
You can also set it to [Manual (Continuous)] from the [Hopper Level] screen via shortcut key. For details about the setting, refer to "1.7 Setting the Loading Capacity of the Hopper" (page 23).

3 Load the documents on the hopper with the front side (scanning side) facing up.
Make sure not to place the documents all the way in.

4 Perform a scan from ScandAll PRO.
For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

5 Insert the document until the top edge touches the rollers on the inside.

When more than one sheet is loaded, only insert the document on the top of the stack.



⇨ The document is picked, scanned, then ejected onto the stacker. After the scan, the scanner waits for the next sheet to be fed for the time specified in the Software Operation Panel.

In [Continuous Feed] mode, the scanner separates the documents and only scans one sheet at a time even when multiple sheets are accidentally fed.

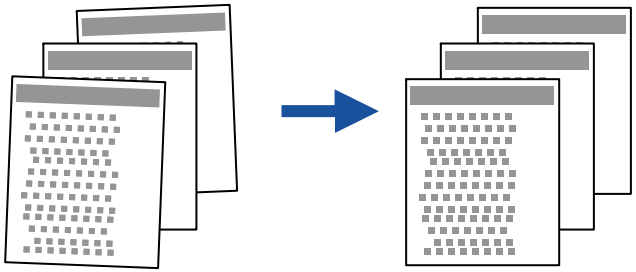
6 Repeat step 5 until all the documents are scanned.

- Scanning can be stopped immediately by pressing the [Counter Reset] button on the operator panel.
- Scanning stops when no document is loaded on the hopper after the time specified in the Software Operation Panel.
- The scanner waits for the period of manual feed timeout even when there is no document left on the hopper.
- The timeout period for manual feeding can be configured on the operator panel or in the Software Operation Panel.
- Continuous Feed mode can be cleared in [10: Hopper Level] of the [Main Menu] on the operator panel. The hopper is set to [4: Lower] when you clear manual feeding (continuous). For more details about the settings, refer to "4.2 Main Menu" (page 65).

5.4 Configuring Post-Scan Operations and Handling

Automatically Correcting Skewed Document Images

You can automatically correct the scanned images when the documents are fed into the ADF skewed.

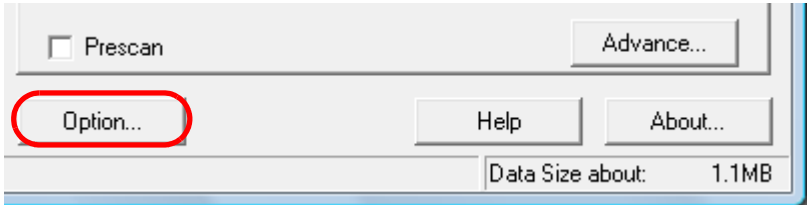


Original Output images

1 Load documents on the hopper.
For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

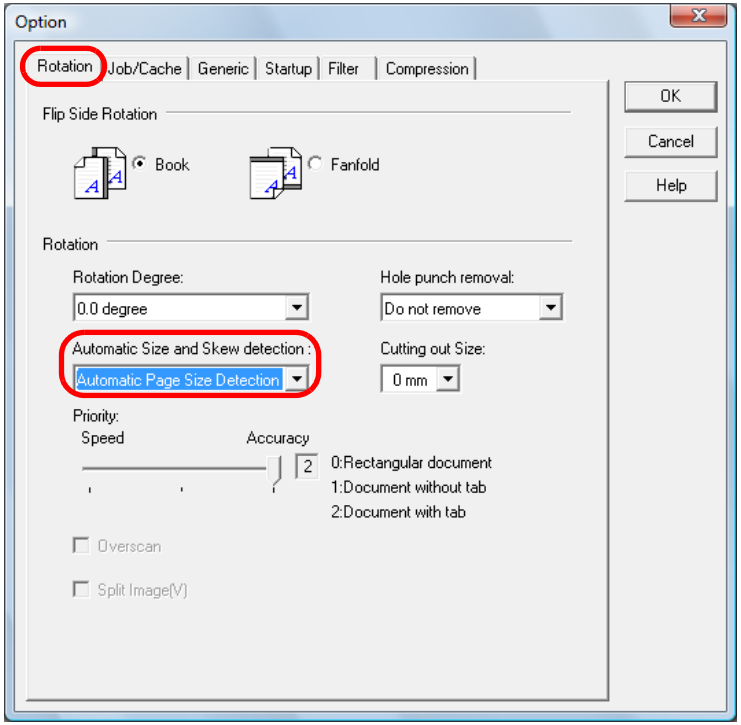
2 Start up ScandAll PRO and open the [TWAIN Driver (32)] dialog box.
For information on how to display the [TWAIN Driver (32)] dialog box, refer to "ScandAll PRO V2.0 User's Guide".

3 Click the [Option] button.



⇨ The [Option] dialog box appears.

4 Click the [Rotation] tab and select [Automatic Deskew] or [Automatic Page Size Detection] in the [Automatic Size and Skew detection] drop-down list.



See the table below for levels of priority.

Priority	Documents suitable for scanning
0	Rectangular documents with straight edges
1	Documents without tabs (those that have no index sheets, sticky notes, or index stickers)
2	Documents with tabs (those that have index sheets, sticky notes, or index stickers)

See the table below for cropping widths.

Cropping width	Description
0 mm	No adjustment is made to the output image.
1 to 5 mm	Black areas are added around the edges of the document so that the image is not chipped. Specify the amount to add from 1 to 5 mm in increments of 1 mm.
-5 to -1 mm	It deletes the area around the document and leave no black areas. Specify the amount to delete from -5 to -1 mm in increments of 1 mm.

- [Automatic Page Size Detection] is not available with the following types of documents:
  - Thin documents with a paper weight of 52 g/m^2 (14 lb) or less
  - Non-rectangular documents
  - Documents whose margins are filled with dark color
- When scanning wide documents, it may not add the specified amount of black area around the document even if the cropping width is specified in the range of 1 to 5 mm.

- When [Automatic Deskew] is selected, the paper size of documents is not automatically detected.
- Selecting [Automatic Page Size Detection] may slow down the scanning speed. Note that, by changing the setting in [Priority], you can change the accuracy of [Automatic Page Size Detection].
  - Specify a smaller value to prioritize the scanning speed, and a larger value to prioritize the detection accuracy.
  - When detecting the paper size of documents on which index sheets, sticky notes or index stickers are attached, specify “2” for priority.

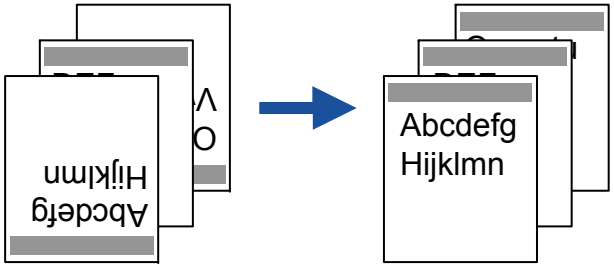
5 Click the [OK] button.
⇨ It returns to the [TWAIN Driver (32)] dialog box.

6 Click the [OK] button in the [TWAIN Driver (32)] dialog box.
⇨ The settings are saved.

7 Perform a scan from ScandAll PRO.
For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

Automatically Correcting the Page Orientation

You can automatically rotate the scanned images to their correct page orientations when a batch of documents are scanned with mixed page orientations.

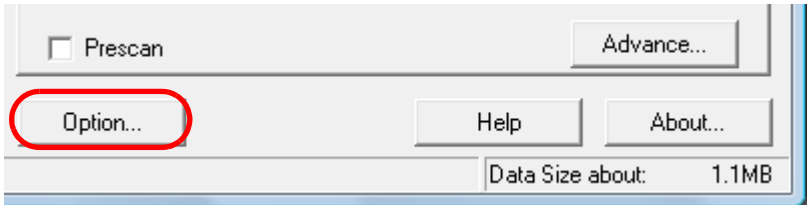


Original Output images

1 Load documents on the hopper.
For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

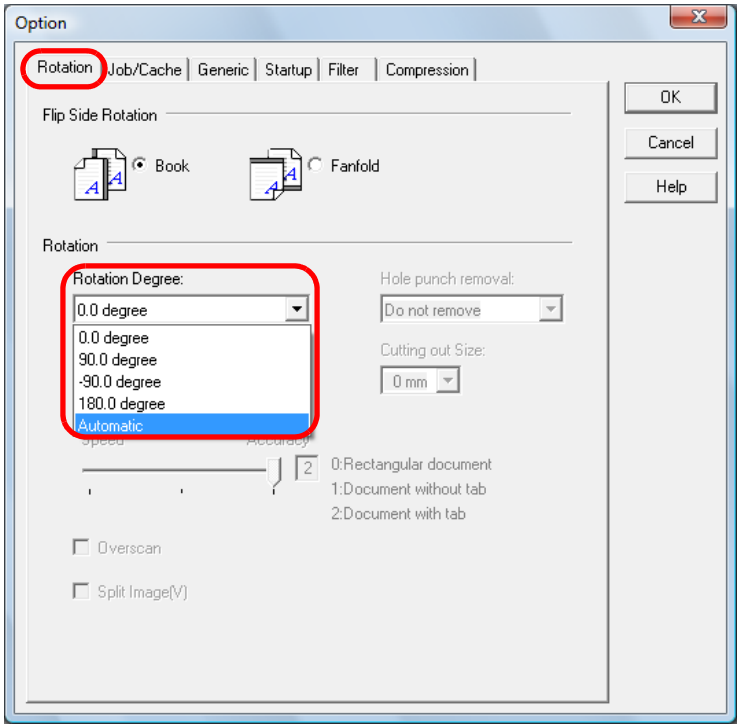
2 Start up ScandAll PRO and open the [TWAIN Driver (32)] dialog box.
For information on how to display the [TWAIN Driver (32)] dialog box, refer to "ScandAll PRO V2.0 User's Guide".

3 Click the [Option] button.



⇨ The [Option] dialog box appears.

4 Click the [Rotation] tab and select [Automatic] in the [Rotation Degree] drop-down list.



- The following types of documents may not be adjusted correctly because the page orientation is detected based on the characters printed on the document:
  - Documents with a scanning resolution outside the ranges of:
    300 to 600 dpi (Black & White mode)
    200 to 600 dpi (Color or Grayscale mode)
  - Documents with many extremely large or small characters
  - Documents on which the pitches between lines or characters are extremely narrow, or characters are overlapped with each other
  - Documents with many photographs or figures and few characters
  - Documents with characters printed in various directions (e.g. drawings)
  - Documents written using only capital characters
  - Documents with handwritten characters
  - Skewed documents
  - Documents written in a language other than the supported languages; Japanese, English, French, German, Italian, Spanish, Chinese (Simplified, Traditional), Korean, Russian, and Portuguese.
  - Documents with characters on patterned background
  - Documents in a complex layout
  - Documents with a large amount of image noise
- The language selected in the Windows [Regional and Language Options] is used for judging the text on the document.
- The image orientation may not be corrected properly depending on the scanner driver setting at scanning (e.g. dithering).
- If you cannot correct the image orientation properly, use the Edge Emphasis function of the driver to correct it.
- Shadows may remain on the edge of the scanned image.
- [Automatic] in [Rotation Degree] is available only when ScandAll PRO is installed.

5 Click the [OK] button.
⇨ It returns to the [TWAIN Driver (32)] dialog box.

6 Click the [OK] button in the [TWAIN Driver (32)] dialog box.
⇨ The settings are saved.

7 Perform a scan from ScandAll PRO.
For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

Saving Scanned Images in PDF Format

There are two ways to create PDF files:

By ScandAll PRO

Recommended when you want to create PDF files according to your business needs, by scanning in color or grayscale mode.

- Reduce the data size of the PDF file
- Easily create PDF files without any special operations

By Adobe Acrobat

Recommended when you want to create PDF files quickly, by scanning in binary mode (black & white).

- Quickly create PDF data in the same resolution as the original image
- Create PDF data in an arbitrary size by changing the compression rate

Although the data size is usually very large for color documents, you can drastically reduce the data size by using Acrobat Distiller before saving the image.

For more details, refer to " How to reduce the file size by Acrobat Distiller" (page 107).

Notes on the use of Adobe Acrobat

- For [Resolution], [Scan Type], and [Image Mode], Adobe Acrobat's settings are given priority over the scanner driver settings, thus the scanned image may not be displayed as previously configured in the scanner driver.
- The following functions are not available:
  - [256 Color] and [8 Color] modes
  - [Rotation Degree] specified when [End of Page Detection] is selected
  - Long Page Scanning
  - Automatic Page Size Detection

- When you use Adobe Acrobat to scan and convert a document into PDF, the output image may not turn out as intended:
  - When the [Edge shadow removal] option of Acrobat and [Digital Endorser] or [Black Background] of TWAIN scanner driver are enabled, character strings embedded in the image or the background may be lost.
    Solution 1:
    1 In Acrobat, select [File] → [Create PDF] → [From Scanner] → [Custom Scan].
    2 In the [Custom Scan] dialog box, click the [Options] button next to the [Small Size/High Quality] slide bar under [Document].
    3 In the [Optimization Options] dialog box, either set [Edge shadow removal] to [Off], or set [Color/Grayscale] and [Monochrome] under [Compression] to a setting other than [Adaptive].

    Solution 2:
    Adjust the scanning density of the TWAIN scanner driver.
  - When you scan in a resolution lower than Adobe's recommended resolution with [Color/Grayscale] and/or [Monochrome] under [Compression] set to [Adaptive] in Acrobat, the output image may not be satisfactory.
    Solution:
    Under [Compression], set [Color/Grayscale] and/or [Monochrome] to a setting other than [Adaptive].
  - Since scanning of documents longer than A3 or Double-Letter (11 × 17 in.) size is not supported in Acrobat, you may not be able to perform scanning successfully when [Overscan] is enabled in the TWAIN scanner driver.
    Solution:
    To scan a Double-Letter (11 × 17 in.) or A3 sized document, do not enable [Overscan] in the TWAIN scanner driver.
  - For more details on using Acrobat and other information, refer to the Adobe Acrobat Help ("Create a PDF file from a scanned document") or http://www.adobe.com/support/acrobat/ from the Adobe website.

By ScandAll PRO

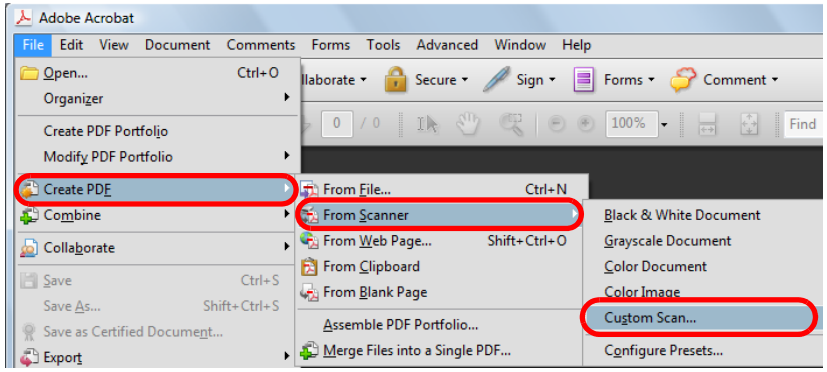
For information on how to create PDF files by ScandAll PRO, refer to "ScandAll PRO V2.0 User's Guide".

By Adobe Acrobat

1 Load a document on the hopper.
For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

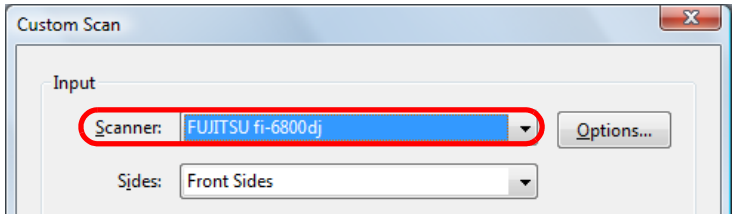
2 Select the [Start] menu → [All Programs] → [Adobe Acrobat].
⇨ Adobe Acrobat is started up.

3 Select the [File] menu → [Create PDF] → [From Scanner] → [Custom Scan].



⇨ The [Custom Scan] dialog box appears.

4 Select [FUJITSU fi-6800dj] for [Scanner].

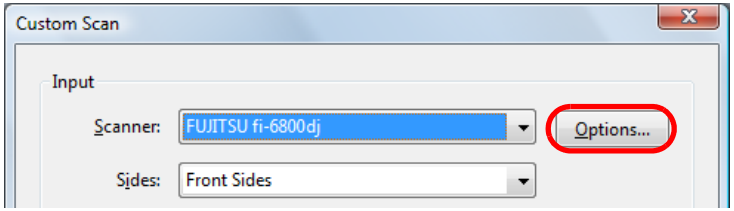


If your document is scanned by the default settings, the output image may not be satisfactory. It is recommended to change the settings as follows:

1 Clear the [Make Searchable (Run OCR)] check box.
2 Click the [Options] button for [Small Size / High Quality] under [Document].
⇨The [Optimization Options] dialog box appears.
3 Select [Custom Settings] and configure the following settings:

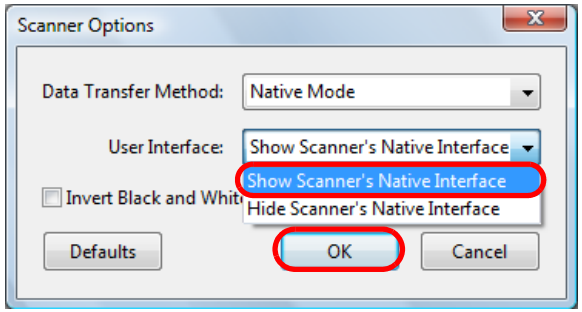
- Color/Grayscale: none
- Monochrome: JBIG2 or CCITT Group 4
- Background removal: Off
- Edge shadow removal: Off

5 Click the [Options] button.



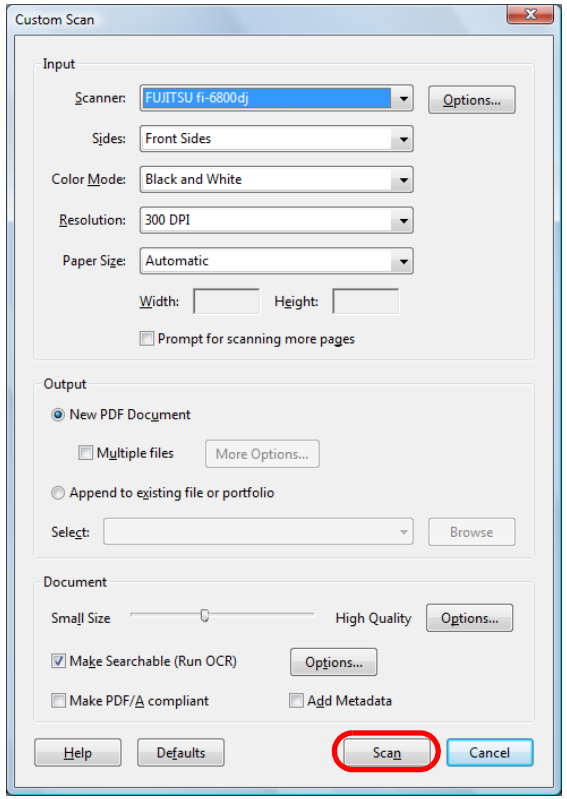
⇨ The [Scanner Options] dialog box appears.

6 Select [Show Scanner's Native Interface] for [User Interface], and then click the [OK] button.



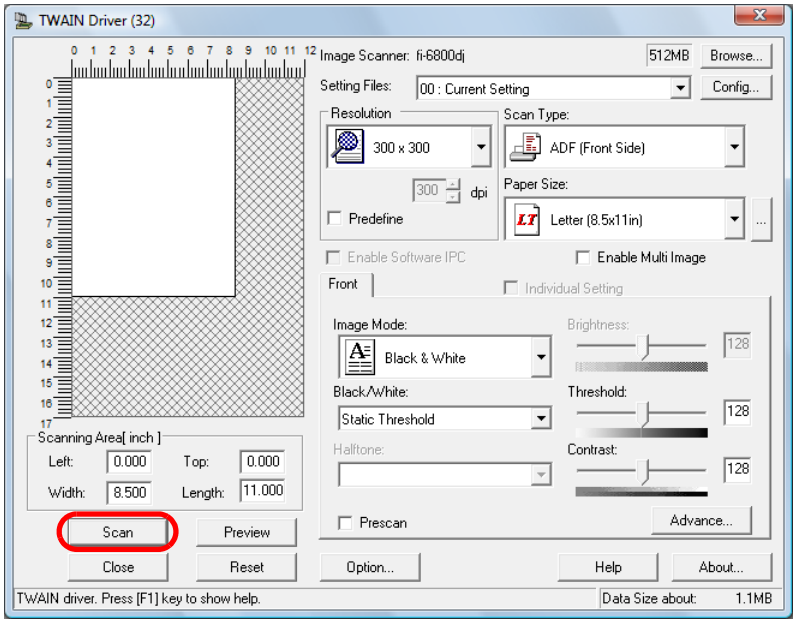
➪ The [Scanner Options] dialog box closes and it returns to the [Custom Scan] dialog box.

7 Click the [Scan] button.

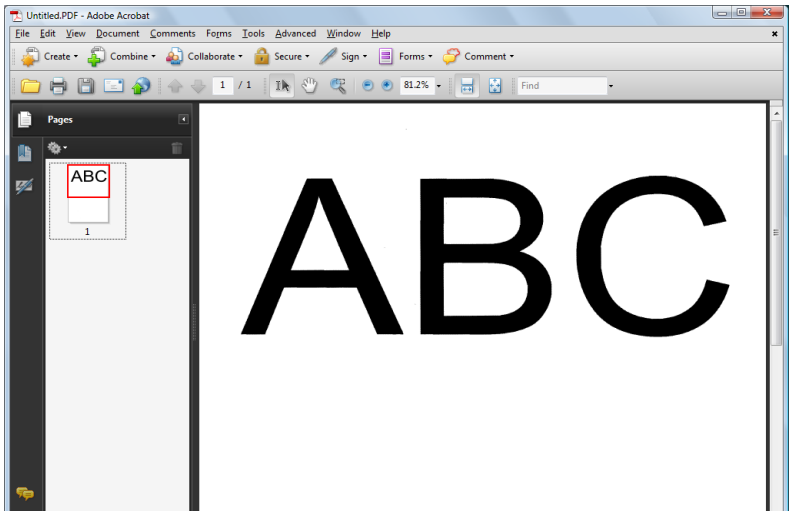


➪ The [TWAIN Driver (32)] dialog box appears.

8 Configure settings such as [Resolution] and [Paper Size], and then click the [Scan] button.



➪ The scanned image is displayed.



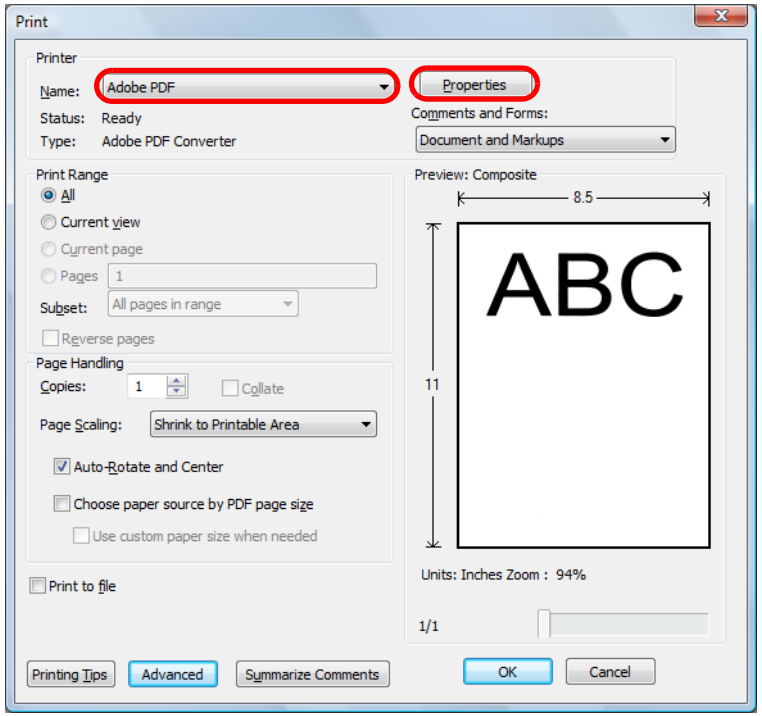
9 Select the [File] menu → [Save As], and save the scanned image to file.
For information on how to use Adobe Acrobat, refer to the Adobe Acrobat Help.

How to reduce the file size by Acrobat Distiller

Depending on the scan setting, the file size may be greatly increased. To reduce the data size, try saving the scanned image by the following method (note that this takes longer than usual to save):

1 Select the [File] menu → [Print].

2 In the [Print] dialog box, select [Adobe PDF] for [Name].



3 Click the [Properties] button.
⇨The [Adobe PDF Document Properties] dialog box appears.

4 Click the [Adobe PDF Settings] tab.

5 Select a job option in the [Adobe PDF Settings] tab.
For example, select [Smallest File Size].

6 Click the [OK] button.

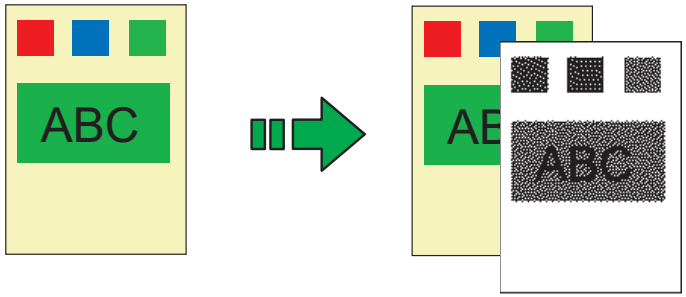
7 In the [Print] dialog box, click the [OK] button.
⇨The [Save PDF File As] dialog box appears.

8 Type in a file name and click the [Save] button to save.

Outputting in Multi-Image Mode

You can obtain both color/grayscale and black & white image outputs with one scan (this is called the Multi Image Output function).

> This function is not supported in some applications.



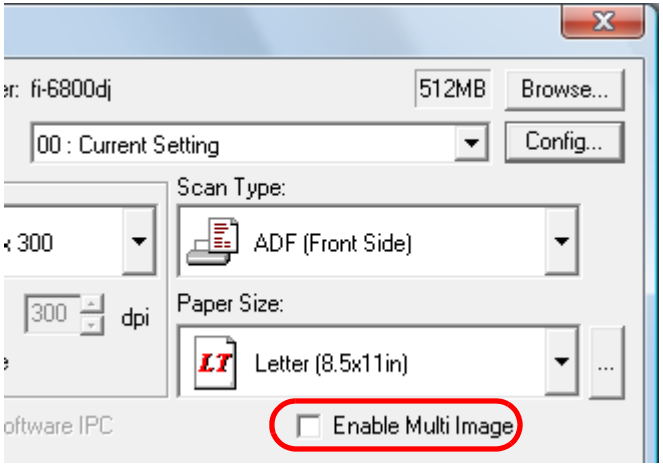
Original Generated images

Example: When a color document is scanned

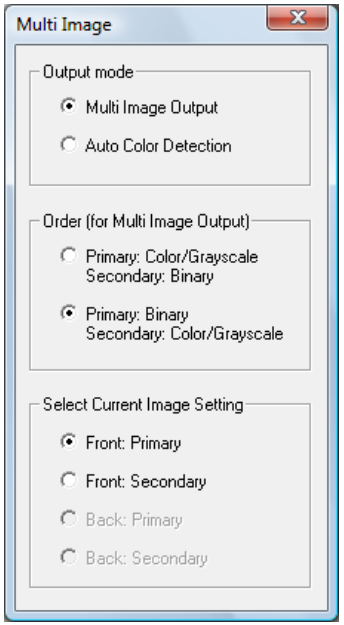
1 Load a document on the hopper.
For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

2 Start up ScandAll PRO and open the [TWAIN Driver (32)] dialog box.
For information on how to display the [TWAIN Driver (32)] dialog box, refer to "ScandAll PRO V2.0 User's Guide".

3 Select the [Enable Multi Image] check box.



⇨ The [Multi Image] dialog box appears.



4 Select [Multi Image Output] for [Output mode].

5 In [Order (for Multi Image Output)], select the order to output multi-images.

- Primary: Color/Grayscale
  Secondary: Binary
  First, a color or grayscale image is output, and then a black & white image.
- Primary: Binary
  Secondary: Color/Grayscale
  First, a black & white image is output, and then a color or grayscale image.

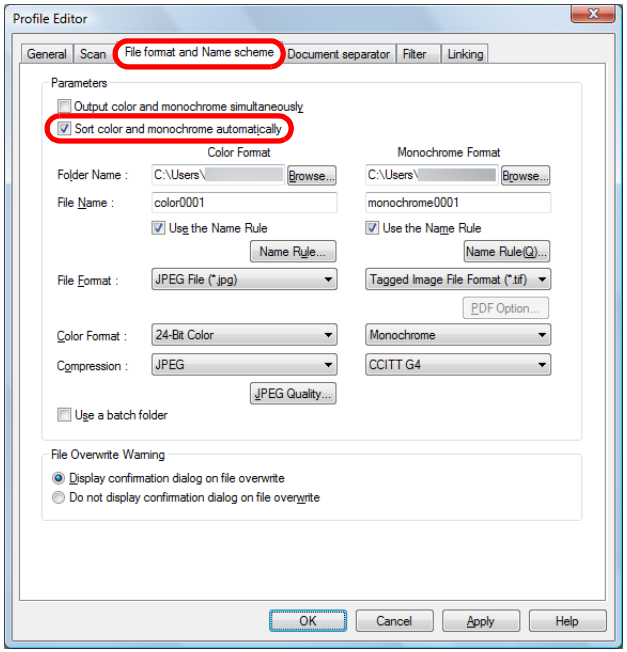
6 Under [Select Current Image Setting], select a side (if in Duplex Scan mode).
In the [TWAIN Driver (32)] dialog box, click the [OK] button.

7 Click the [OK] button in the [TWAIN Driver (32)] dialog box.
⇨ The settings are saved.

8 Perform a scan from ScandAll PRO.
For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

You can use a batch profile to change settings such as the folders to save respective scanned color/grayscale and black & white images, and their file formats and names. The procedure is as follows:

1 In the [Profile Editor] dialog box, select the [File format and Name scheme] tab, and then select the [Sort color and monochrome automatically] check box.



2 Specify the respective folder names to save, the file formats, and the file names for the color/grayscale and black & white images.

3 Click the [OK] button.
⇨The settings are saved.

4 Perform a batch scan.
For information on how to perform batch scanning, refer to "ScandAll PRO V2.0 User's Guide".

Automatically Detecting the Document Color (Color/Monochrome)

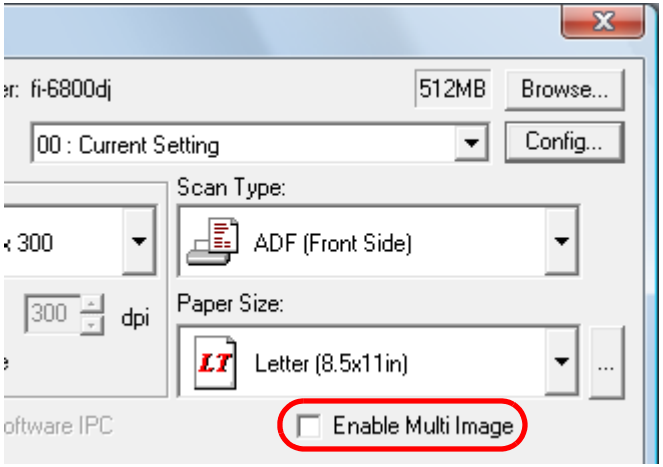
You can configure settings so the scanner will automatically detect whether the images are color (or grayscale) or black & white.

> This function is not supported in some applications.

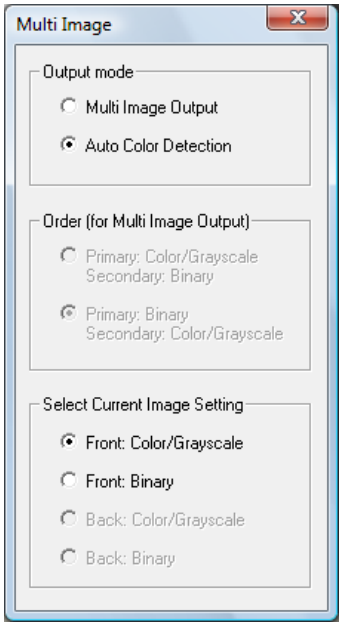
1 Load a document on the hopper.
For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

2 Start up ScandAll PRO and open the [TWAIN Driver (32)] dialog box.
For information on how to display the [TWAIN Driver (32)] dialog box, refer to "ScandAll PRO V2.0 User's Guide".

3 Select the [Enable Multi Image] check box.



⇨ The [Multi Image] dialog box appears.



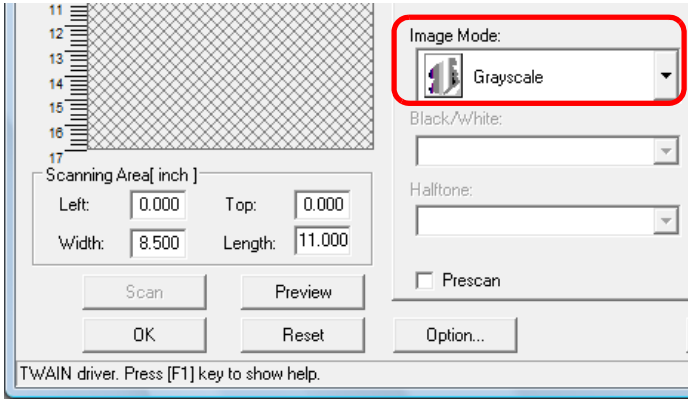
4 Select [Auto Color Detection] for [Output mode].

5 Under [Select Current Image Setting], select the side(s) to scan.

Configure the scan settings in the [TWAIN Driver (32)] dialog box.

You need to pre-configure settings for [Color/Grayscale] detection as well as those for [Binary] detection.

When the document is recognized as a color/grayscale document, it is output in the mode selected under [Image Mode] in the [TWAIN Driver (32)] dialog box.



6 Click the [OK] button in the [TWAIN Driver (32)] dialog box.

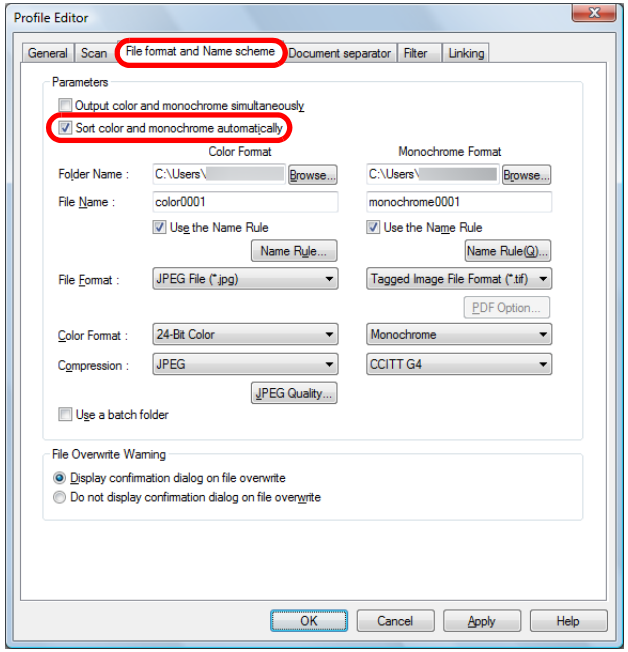
⇨ The settings are saved.

7 Perform a scan from ScandAll PRO.

For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

You can use a batch profile to change settings such as the folders to save respective scanned color/grayscale and black & white images, and their file formats and names. The procedure is as follows:

1 In the [Profile Editor] dialog box, select the [File format and Name scheme] tab, and then select the [Sort color and monochrome automatically] check box.



2 Specify the respective folder names to save, the file formats, and the file names for the color/ grayscale and black & white images.

3 Click the [OK] button.

⇨The settings are saved.

4 Perform a batch scan.

For information on how to perform batch scanning, refer to "ScandAll PRO V2.0 User's Guide".

Adjusting the Scanned Image in [Image Adjustment] Dialog Box

You can check and adjust the scanned image in the [Image Adjustment] dialog box.

1 Load a document on the hopper.
For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

2 Start up ScandAll PRO, and select [Preferences] in the [Tool] menu.
➪ The [Setup] dialog box appears.

3 Select [TWAIN] for [Device Driver] in the [Scan] tab.

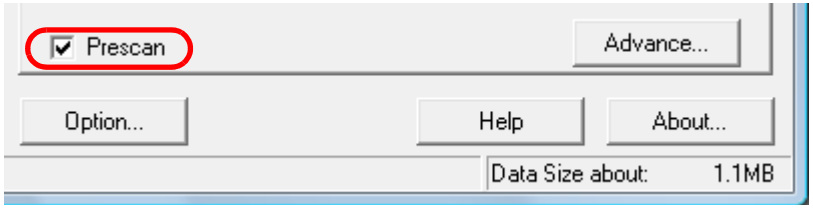
4 Click the [OK] button.

5 In the [Scan] menu, select [Scan Settings].
➪ The [Scan Settings] dialog box appears.

6 Select the [Show TWAIN dialog before each batch scan process] check box.

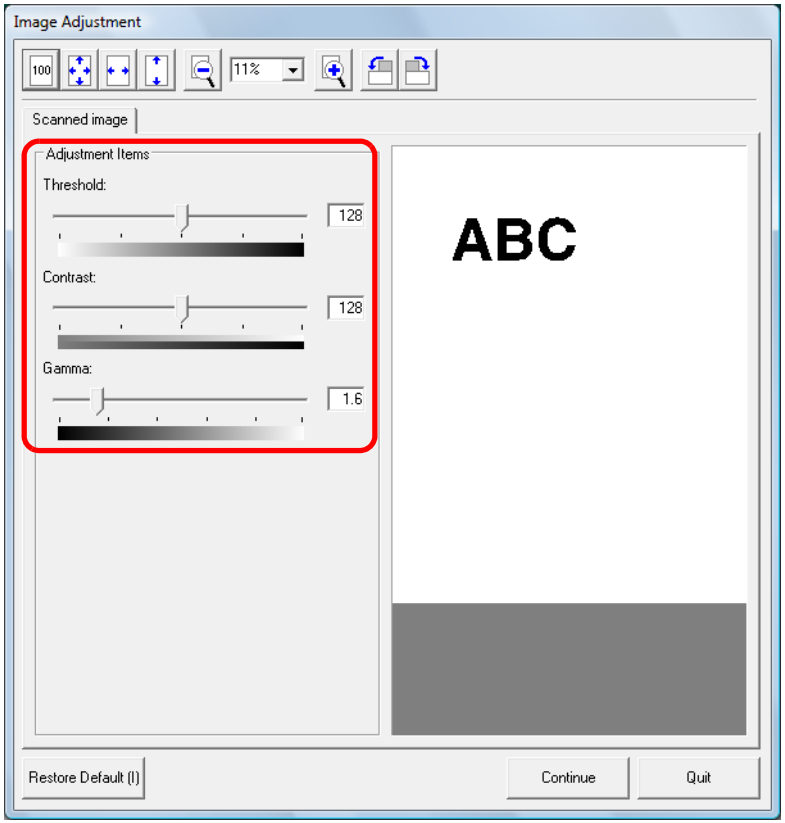
7 Click the [Scan] button.
➪ The [TWAIN Driver (32)] dialog box appears.

8 Select the [Prescan] check box.



9 Click the [Scan] button.
➪ The scanned image appears in the [Image Adjustment] dialog box.

10 Check the scanned image and change the parameters in [Adjustment Items] if necessary.



11 Click the [Continue] button.
➪ Scanning is continued according to the adjusted setting.

5.5 Customizing the Hardware Settings

Using a Button on the Scanner to Start Scanning

You can perform scanning by simply pressing the [Scan] button or the [Send to/Pause] button on the scanner.
For this, you first need to assign the applications to launch for each button.

Computer settings

1 Confirm that the scanner and the computer are connected, and power on the scanner.
For information on how to connect the scanner and the computer, refer to “Connecting the Cables” in “Getting Started”.

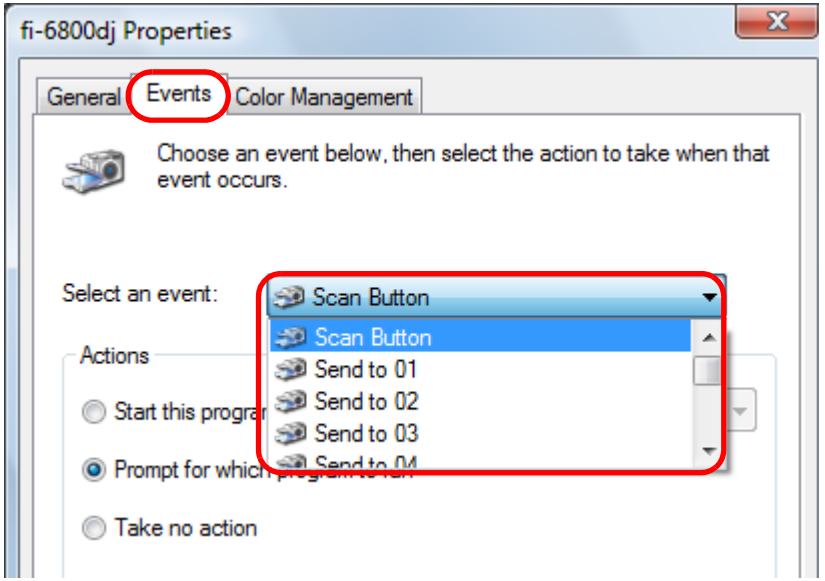
2 Select the [Start] menu → [Control Panel].
⇨ The [Control Panel] dialog box appears.

3 Click the [Hardware and Sound] icon.
⇨ The [Hardware and Sound] dialog box appears.

4 Click the [Scanners and Cameras] icon.
⇨ The [Scanners and Cameras] dialog box appears.

5 Display the scanner properties.
Double-click the scanner icon.

6 Click the [Events] tab and select an event.
From the [Select an event] menu, select an event from which you want to launch an application.

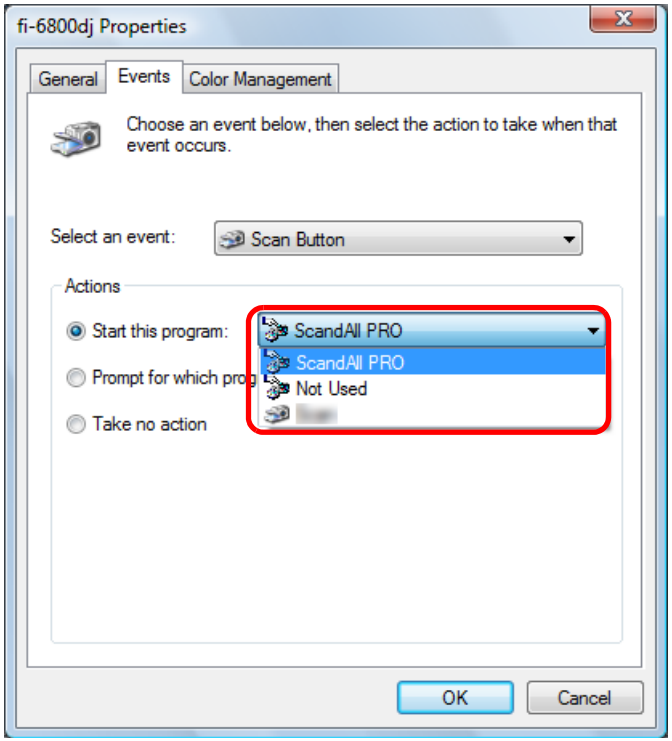


In this function, the following events can be specified:

- [Scan] button (when the [Scan] button is pressed)
- [Send to 01] to [Send to 50] (when the [Send to/Pause] button is pressed)

7 Select an application to be launched by the [Send to] or [Scan] button event and an operation to be performed.

Click [Start this program] under [Actions], and select an application from the menu shown on the right.



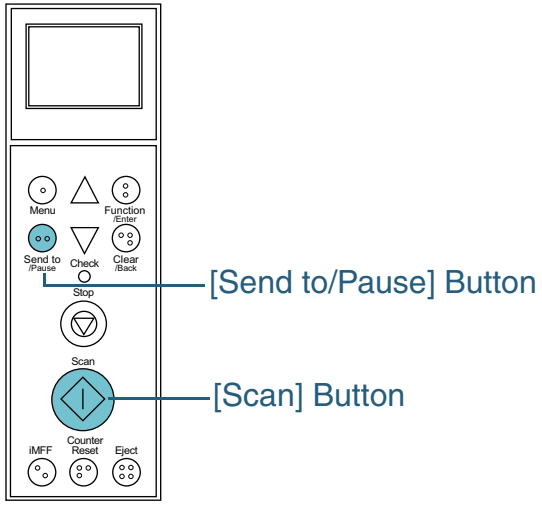
8 Click the [OK] button.

For more details about ScandAll PRO, refer to "ScandAll PRO V2.0 User's Guide".

If you are using an application other than ScandAll PRO, the setup of the computer is completed here. Proceed to configure the scanner settings.

- The windows that appear and the operations differ by the operating system that you are using.
- To configure multiple buttons, repeat steps 5 to 8.
- To enable this setting in Windows 2000, click [OK] or [Apply] for each button and restart the computer.

Scanner settings



- [Scan] button

  No particular setting is required.

  ⇨ The specified application starts when the [Scan] button is pressed.
- [Send to/Pause] button

  In the [Main Menu] of the operator panel, change the setting number for the [Send to/Pause] button which is displayed on the LCD.

  Match the number with the scanner button event configured in the computer ([Send to 01] to [Send to 50]).

  For instance, display "F02" in the LCD's indicator to execute an event configured for [Send to 02].

  ⇨ The specified application starts when the [Send to/Pause] button is pressed.

- For more details about the operator panel, refer to "Chapter 4 How to Use the Operator Panel" (page 60).
- For information on how to change the setting number for [Send to/Pause] button, refer to "4.3 Function Selection" (page 81).

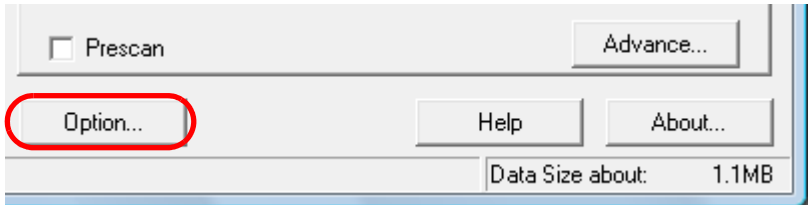
Detecting Multifeed Errors

Multifeed is an error when two or more sheets overlap and are fed through the ADF at once. It is also called a “multifeed” when a difference in document length is detected.
You can set the scanner to detect multifeeds and display an error message.
Also, a window in which you can check the multifeed images can be displayed.
Settings for multifeed detection can be configured in the scanner driver or the Software Operation Panel.
For information on how to configure by the Software Operation Panel, refer to "Specifying a multifeed detection method [Multifeed]" (page 210).

1 Load documents on the hopper.
For information on how to load documents, refer to "Chapter 2 How to Load Documents" (page 33).

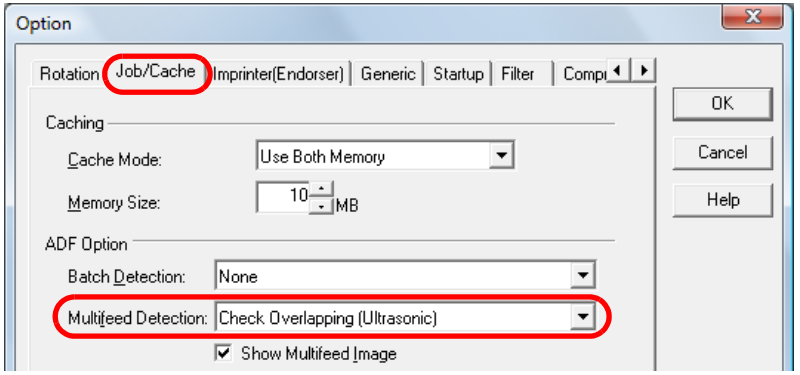
2 Start up ScandAll PRO and open the [TWAIN Driver (32)] dialog box.
For information on how to display the [TWAIN Driver (32)] dialog box, refer to "ScandAll PRO V2.0 User's Guide".

3 Click the [Option] button.



⇨ The [Option] dialog box appears.

4 Click the [Job/Cache] tab and specify the detection method in the [Multifeed Detection] drop-down list under [ADF Option].

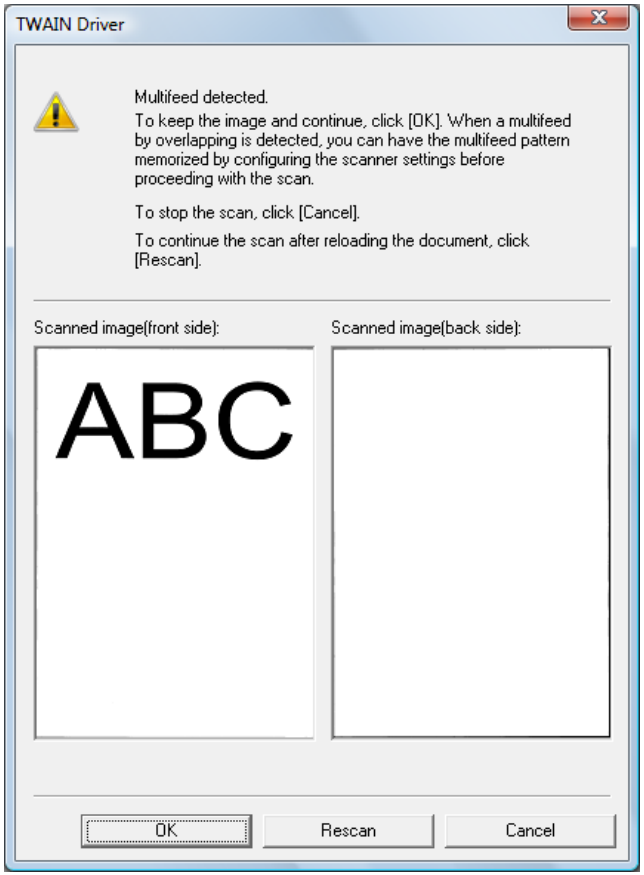


The following are the conditions of detecting multifeeds.

Condition	Description
None	Does not detect multifeed.
Panel setting	Enables the setting of the Software Operation Panel.
Check Overlapping (Ultrasonic)	Uses the ultrasonic sensors inside the ADF to monitor the documents during feeding and to identify multifeeds according to the deviation of the reflected ultrasonic waves.
Check Length	Monitors the document length during feeding, and identifies multifeeds according to the deviation of detected lengths. Note that multifeed cannot be detected accurately when scanning a mixed batch (of different sizes) or a Job Separation Sheet.
Check Overlapping and Length	Monitors both document overlapping and length to detect multifeeds. Note that multifeed cannot be detected accurately when scanning a mixed batch (in different sizes) or a Job Separation Sheet.

For more details about multifeed detection, refer to "Conditions for Multifeed Detection" (page 44).

When the [Show multifeed image] check box is selected, it displays a dialog box where you can check the image(s) that multifeed was detected on.



- Scanned image(front side), scanned image(back side)
  Shows the multifeed image(s).
- [OK] button
  Keeps the image and continues scanning. To have the multifeed pattern memorized, you need to select the [Auto-Memorize MF Pattern (only when MF images are displayed)] check box in the iMFF settings described in "Specifying an Area Not to Detect Multifeed [Intelligent Multifeed Function]" (page 216) of the Software Operation Panel beforehand.
  You can change whether or not to detect multifeed by pressing the [iMFF] button on the operator panel. When you use the operator panel, priority is given to the multifeed pattern memory setting of the operator panel.
- [Rescan] button
  Continues scanning after setting the documents on the hopper again.
- [Cancel] button
  Discards the multifeed image and stops the scan. Note that images up until the detection of multifeed are kept.

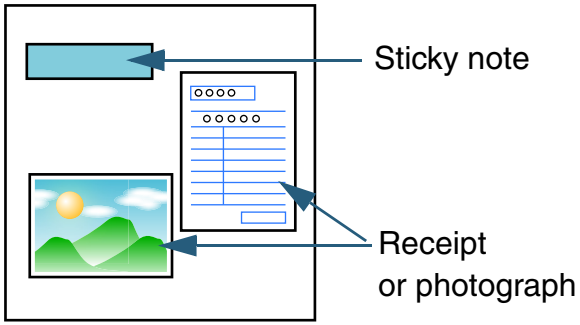
5 Click the [OK] button.
⇨ It returns to the [TWAIN Driver (32)] dialog box.

6 Click the [OK] button in the [TWAIN Driver (32)] dialog box.
⇨ The settings are saved.

7 Perform a scan from ScandAll PRO.
For information on how to perform scanning, refer to "ScandAll PRO V2.0 User's Guide".

Bypassing Multifeed Detection for a Fixed Format

If you attempt to scan a document sheet with a sticky note, receipt, or photo glued on it while the Multifeed Detection function is enabled, the scanner may falsely judge this as a multifeed error and discontinue the scanning. To scan these types of documents, the "Intelligent Multifeed Function" is available.
There are two modes to this function. In one mode, you can suppress multifeeds forcibly by using the operator panel on the scanner. In the other mode, you can suppress multifeeds automatically by letting the scanner memorize the locations and the sizes of the attachment.



Intelligent Multifeed Function

The following three modes are available:

Mode	Description
Manual mode (Bypass by front panel button)	Checks for any papers attached every time a multifeed occurs, and continues scanning.
Auto mode 1 (Bypass by combination of length and position)	Used to scan a document stack with paper of the same size attached in the same location.
Auto mode 2 (Bypass by length)	Used to scan a document stack with paper of different sizes attached in different locations.

Irregular images may be output when multifeeds occur.

Modes can be selected from the operator panel or the Software Operation Panel.
For information on how to configure the setting from the operator panel, refer to "4.2 Main Menu" (page 65).
For information on how to configure the setting from the Software Operation Panel, refer to "Specifying an Area Not to Detect Multifeed [Intelligent Multifeed Function]" (page 216).

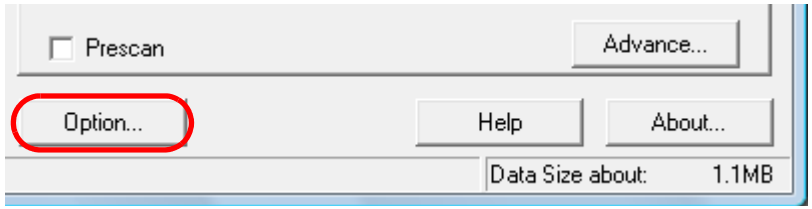
Settings to configure before using this function

Configure the following settings before using this function:

1 Start up ScandAll PRO, and select [Scan Settings] in the [Scan] menu.

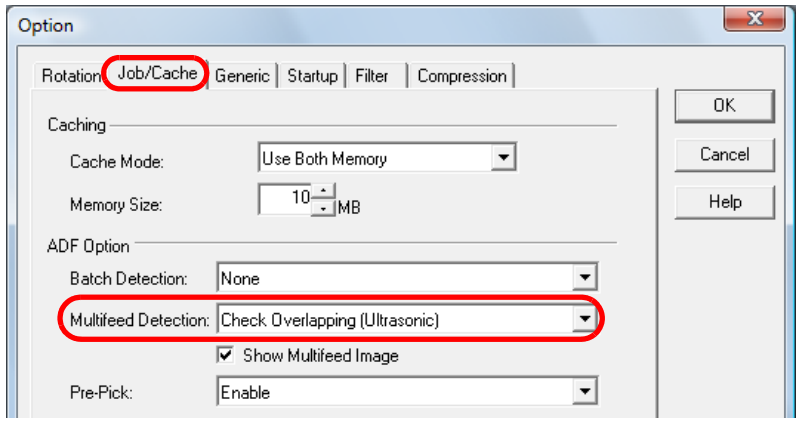
⇨ The [TWAIN Driver (32)] dialog box appears.

2 Click the [Option] button.

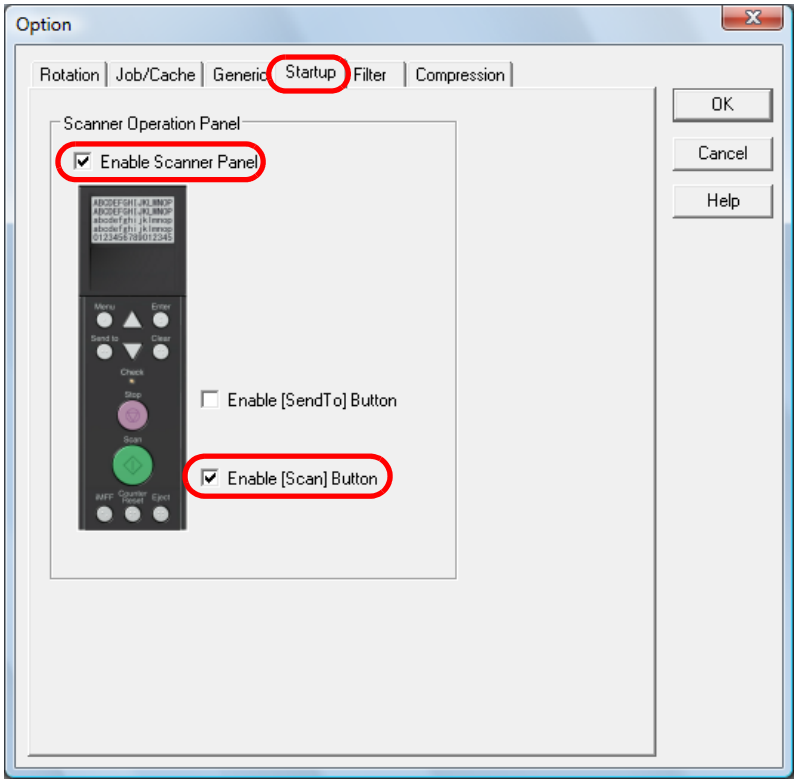


⇨ The [Option] dialog box appears.

3 Select the [Job/Cache] tab, and select [Check Overlapping (Ultrasonic)] or [Check overlapping and length] for [Multifeed Detection] under [ADF Option].



4 Select the [Startup] tab, and then select the [Enable Scanner Panel] and [Enable [Scan] Button] check boxes.



Operational procedure

1 After a multifeed error occurs, either press the [Eject] button to eject the document from the paper path, or open the ADF to remove the document.

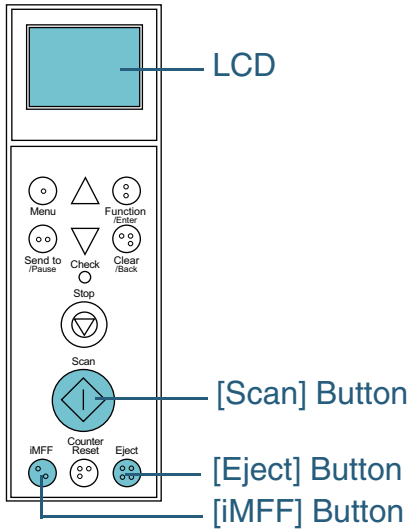
When the document is removed, the display on the operator panel LCD changes as follows:

Upon multifeed	Upon ejecting document
Multifeed detected (Overlap) Press the iMFF button to eject the document and to suppress multifeed detection from next scans. Press the Eject button just to eject the document. When [Ready] is displayed, increase the paper separation force by using the [△] button to suppress multifeeds. (*1)	[Ready (Multifeed)] screen
Multifeed detected (Overlap) Press the Eject button to eject the document. When [Ready] is displayed, increase the paper separation force by using the [△] button to suppress multifeeds. (*1)	
Multifeed detected (Overlap) Press the iMFF button to memorize the multifeed pattern and eject the document. Press the Eject button to eject the document. When [Ready] is displayed, increase the paper separation force by using the [△] button to suppress multifeeds. (*1)	
Multifeed detected (Overlap) Press the iMFF button to memorize the multifeed pattern. Press the Eject button to eject the document. When [Ready] is displayed, increase the paper separation force by using the [△] button to suppress multifeeds. (*1)	
Multifeed detected (Length) Press the Eject button to eject the document.	[Ready] screen

*1: When the paper separation force is set to [■■■■■] which is the maximum level, the part of the message “When [Ready] is displayed, increase the paper separation force by using the [△] button to suppress multifeeds.” does not appear.

2 Place the removed document back on the hopper.

If a multifeed error is detected while no paper is attached on the document, press the [Scan] button or restart scanning via the computer (do not press the [iMFF] button). If there is a paper attachment on the ejected sheet and the attachment is likely to be the cause of the multifeed error, then proceed to the next step.



If you click the [OK] button in the window that shows the multifeed image, step 2 is not required because the scanner feeds the multifeed image and continues the scan.

3 Press the [iMFF] button and confirm that is displayed on the LCD, and then press the [Scan] button or restart scanning from the computer.

Note that, from hereon, in the LCD switches between shown/hidden every time the [iMFF] button is pressed. According to the mode specified, the scanner operates as explained below if documents are scanned while is displayed.

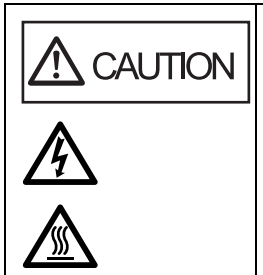
- Manual mode (Bypass by front panel button)
  The next sheet is scanned without multifeed detection, and after the second sheet, multifeed errors are detected based on the settings configured in the scanner driver or the Software Operation Panel.
- Auto mode 1 (Bypass by combination of length and position)
  The scanner memorizes the length and location of the paper (overlap pattern) that caused a multifeed error and continues scanning. When a paper attachment of a similar pattern is detected, the scanner automatically ignores it to suppress multifeed detection. (*1)(*2)
- Auto mode 2 (Bypass by length)
  The scanner remembers the length of the paper (overlap pattern) that caused a multifeed error and continues scanning. When a paper attachment of the same length or shorter is detected, the scanner automatically ignores it to suppress multifeed detection. (*2)

*1: Up to eight overlap patterns can be memorized in this mode. When the 9th overlap pattern is detected, the first pattern that was memorized is erased from the memory.

*2: To erase the memorized overlap patterns and the longest overlap length, press the [iMFF] and [Counter Reset] buttons at the same time for more than two seconds while [Ready] is displayed on the LCD. The LCD will display or when the memory is erased. This allows you to erase multifeed patterns and the longest overlap length that were not supposed to be memorized. Be careful with this operation because all memorized patterns will be erased.
Multifeed patterns can also be erased from the Software Operation Panel or [1: iMFF Setting] in the [Main Menu] of the operator panel.

Chapter 6 Daily Care

This chapter describes how to clean the scanner.

	The glasses inside the ADF become very hot when the scanner is being used. Before you start cleaning the inside, make sure to turn off the power, unplug the power cable and wait at least 15 minutes for the ADF glass to cool down.

	Do not use aerosol spray or spray that contains alcohol to clean the scanner. Dust blown up by strong air from the spray may enter inside the scanner which may cause the scanner to fail or malfunction. Also note that sparks generated by static electricity may cause a fire.

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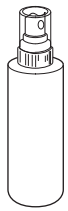
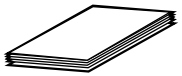
6.1 Cleaning Materials and Locations that Require Cleaning

Cleaning Materials

Cleaning material	Part No.	Remarks
Cleaner F1 	PA03950-0352	100 ml/bottle Moisten a cloth with this fluid and wipe the scanner clean. It may take longer to dry if an excessive amount of this liquid is used. Moisten the cloth with a moderate quantity. Make sure to wipe off this fluid from the cleaning location.
Cleaning Sheet 	CA99501-0016	20 sheets/pack This is an A4 size cleaning sheet. Use two sheets to clean once.
Cleaning Wipe	PA03950-0419	24 packets/box Pre-moistened with Cleaner F1. Cleaning Wipe can be used instead of moistening a cloth with Cleaner F1.
Cotton swab	Commercially available	
Dry cloth		

For more information about the cleaning materials, contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

Locations to Clean and Cleaning Frequency

Cleaning should be performed approximately every 10,000 sheets scanned. Note that this guideline varies depending on the type of documents you scan. For instance, it may be necessary to clean more frequently when you scan documents on which the toner is not sufficiently fused.

Cleaning location	Cleaning Sheet (every 10,000 sheets)	Cloth sprayed with Cleaner F1/Cleaning Wipe (every 10,000 sheets)
Pick Roller	✓	✓
Separator Roller	✓	✓
Brake Roller	✓	✓
Feed Roller	✓	✓
Assist Roller	✓	✓
Pinch Roller	✓	✓
Paper Path	✓	✓
Sheet Guide/ Glass	-	✓
Document Sensor	-	✓
Friction Pad	-	✓

✓ : Cleanable
- : Not cleanable

Cleaning cycles may vary depending on the condition of the documents. Also, cleaning must be performed more frequently when the following types of documents are scanned:

- Smooth-faced documents such as coated paper
- Documents with printed text/graphics that almost cover the entire surface
- Chemically-treated documents such as carbonless paper
- Documents containing a large amount of calcium carbonate
- A large volume of documents written with lead pencil
- Documents on which the toner is not sufficiently fused

6.2 Cleaning the ADF (with Cleaning Sheet)

Use the Cleaning Sheet to clean the rollers on both the upper and lower sides of the paper path.
For more details about the Cleaning Sheet, refer to "Cleaning Materials" (page 122).
Clean by following the instructions specified for the Cleaning Sheet.

> **CAUTION**
> The glasses inside the ADF become very hot when the scanner is being used.
> When cleaning the inside of the scanner, make sure to unplug the power cable and wait for at least 15 minutes before you start cleaning.

■Cleaning with the Cleaning Sheet

1 Press the power button on the front of the scanner.
⇨ [Ready] is displayed on the LCD.

2 Press the [Menu] button.
⇨ [Main Menu] is displayed on the LCD.

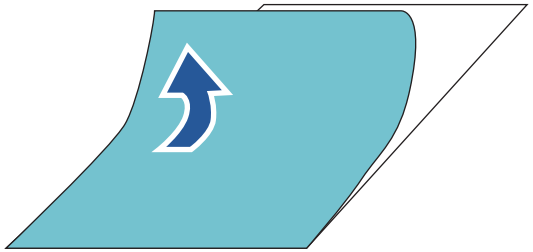
3 Press the [△] or [▽] button and select [21: Cleaning], then press the [Function/Enter] button to confirm.
⇨ [Cleaning (Sheet)] is displayed on the LCD.

> Do not perform scanning from the scanner driver during cleaning.

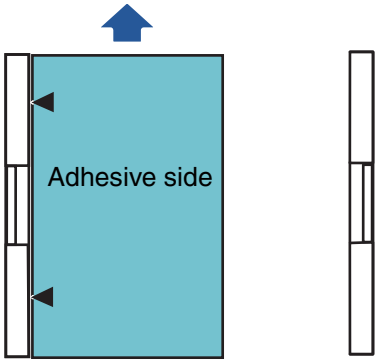
4 Set the width of the hopper side guides to B4.
For information on how to set the hopper side guides, refer to "2.1 Loading Documents" (page 34).

5 Adjust the stacker extension to the length of the Cleaning Sheet, and pull up the paper stop.
For information on how to set the stacker, refer to "1.8 Stacker Setting" (page 24).

6 Remove the protective paper off the Cleaning Sheet.

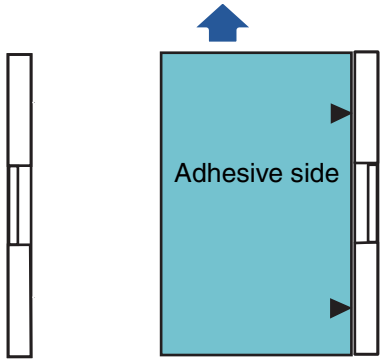


7 Place the Cleaning Sheet on the left-hand side between the side guides with its adhesive side facing up.



8 Press the [Scan] button.
⇨ The Cleaning Sheet is fed through and ejected onto the stacker.

9 Place the same Cleaning Sheet on the right-hand side between the side guides with its adhesive side facing up.



10 Press the [Scan] button.
⇨ The Cleaning Sheet is fed through and ejected onto the stacker.

11 Remove the protective paper off a new Cleaning Sheet.

12 Place the Cleaning Sheet on the left-hand side between the side guides with its adhesive side facing down.

13 Press the [Scan] button.
⇨ The Cleaning Sheet is fed through and ejected onto the stacker.

14 Place the same Cleaning Sheet on the right-hand side between the side guides with its adhesive side facing down.

15 Press the [Scan] button.
⇨ The Cleaning Sheet is fed through and ejected onto the stacker.

16 Press the [Stop] button.
⇨ Cleaning is completed.

17 Reset the cleaning counter.
Reset the counter by one of the following methods.

- Select [23: Show/Clear Counters] from the [Main Menu] on the operator panel, then reset the counter.
  For more details, refer to "4.2 Main Menu" (page 65).
- Start up the Software Operation Panel and reset the counter.
  For more details, refer to "Resetting the counters" (page 186).

6.3 Cleaning the ADF (with cloth)

Use a cloth moistened with Cleaner F1 or a Cleaning Wipe to clean the ADF and other locations.

> **CAUTION**
> The glasses inside the ADF become very hot when the scanner is being used.
> When cleaning the inside of the scanner, make sure to unplug the power cable and wait for at least 15 minutes before you start cleaning.

> If the hopper has been raised, bring it back down to the lower position.
> For information on how to adjust the hopper level, refer to "1.7 Setting the Loading Capacity of the Hopper" (page 23).

1 Turn off the scanner and wait for at least 15 minutes.
For information on how to turn the power off, refer to "1.3 Turning the Power ON/OFF" (page 17).

2 Open the hopper/ADF/top cover.
For information on how to open the hopper, refer to "1.4 Opening/Closing the Hopper" (page 19).

For information on how to open the ADF, refer to "1.5 Opening/Closing the ADF" (page 20).

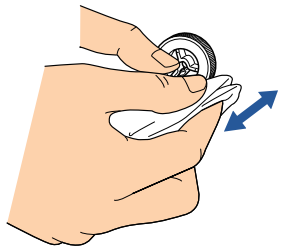
For information on how to open the top cover, refer to "1.6 Opening/Closing the Top Cover" (page 22).

> **CAUTION**
> Be careful not to have your fingers caught when the ADF closes.

3 Use a cloth moistened with Cleaner F1 or a Cleaning Wipe to clean the following locations.

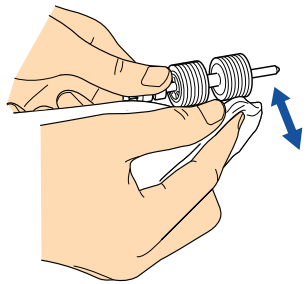
Pick Roller (2 units)

Gently wipe the rollers so that the roller surface does not get damaged. Wipe along the grooves of the roller surface. Clean thoroughly because the feeding performance is affected especially when there is foreign matter stuck on the roller. Remove the rollers for easier cleaning.
For information on how to remove the pick roller, refer to "7.2 Replacing the Pick Roller" (page 135).



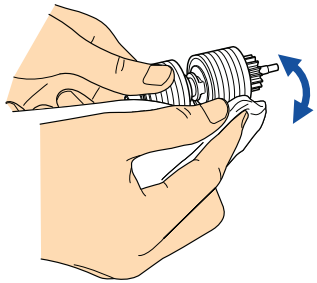
Separator Roller (1 unit)

Gently wipe the rollers so that the roller surface does not get damaged. Wipe along the grooves of the roller surface. Clean thoroughly because the feeding performance is affected especially when there is foreign matter stuck on the roller. Remove the roller for easier cleaning. For information on how to remove the separator roller, refer to "7.3 Replacing the Separator Roller" (page 137).



Brake Roller (1 unit)

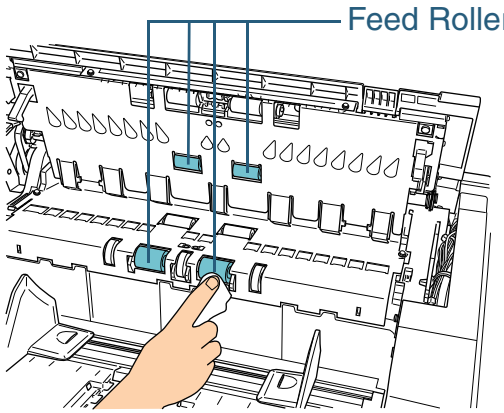
Gently wipe the rollers so that the roller surface does not get damaged. Wipe along the grooves of the roller surface. Remove the roller for easier cleaning. For information on how to remove the brake roller, refer to "7.4 Replacing the Brake Roller" (page 140).



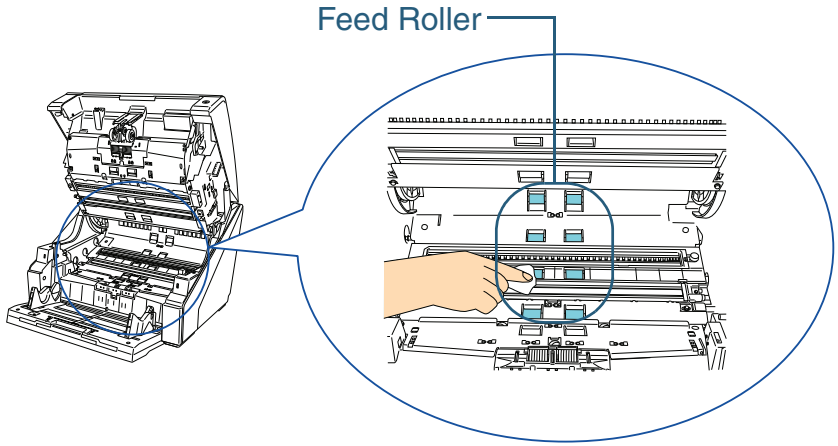
Feed Roller

Gently wipe the rollers so that the roller surface does not get damaged. Clean the whole surface as you rotate the roller manually. Make sure to clean thoroughly because the feeding performance is affected especially when there is black foreign matter on the roller.

- Inside the top cover (rollers: 2 locations × 2 units)

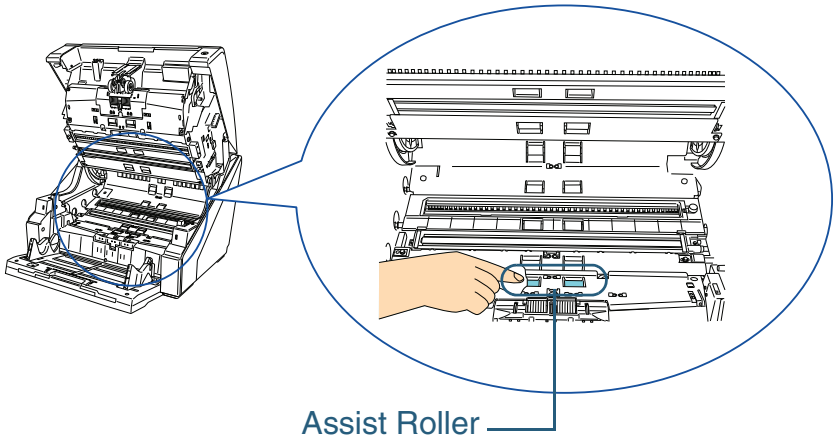


- Paper path lower-side (rollers: 5 locations × 2 units)



Assist Roller (rollers: 1 location × 2 units)

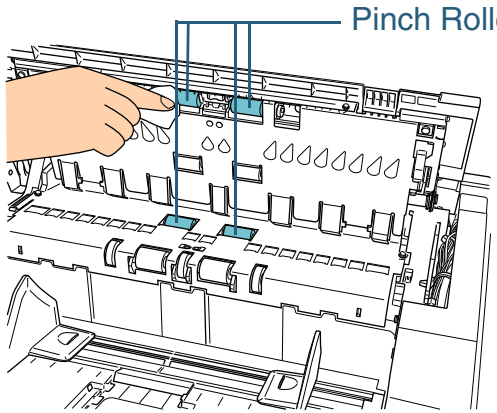
Gently wipe the rollers so that the roller surface does not get damaged. Clean the whole surface as you rotate the roller manually. Make sure to clean thoroughly because the feeding performance is affected especially when there is black foreign matter on the roller.
Assist roller is located on the paper path lower-side.



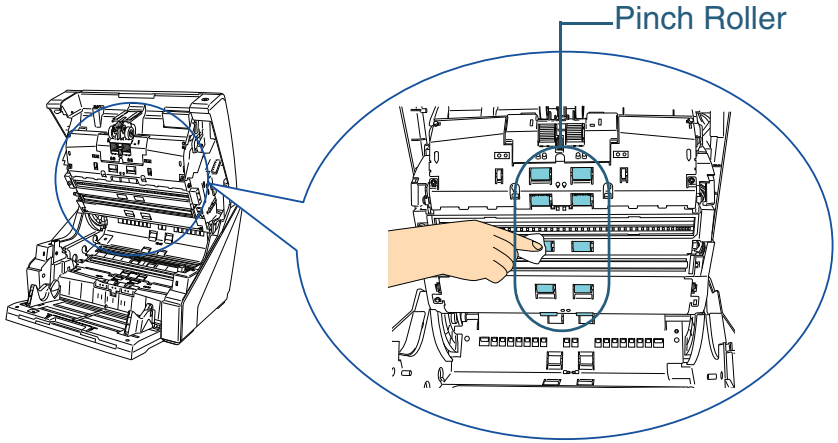
Pinch Roller

Gently wipe the rollers so that the roller surface does not get damaged.
Clean the whole surface as you rotate the roller manually.

- Inside the top cover (rollers: 2 locations × 2 units)



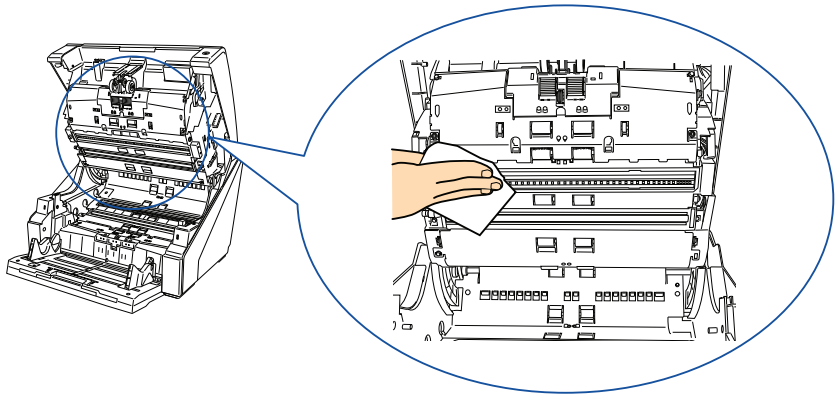
- Paper path upper-side (rollers: 6 locations × 2 units)



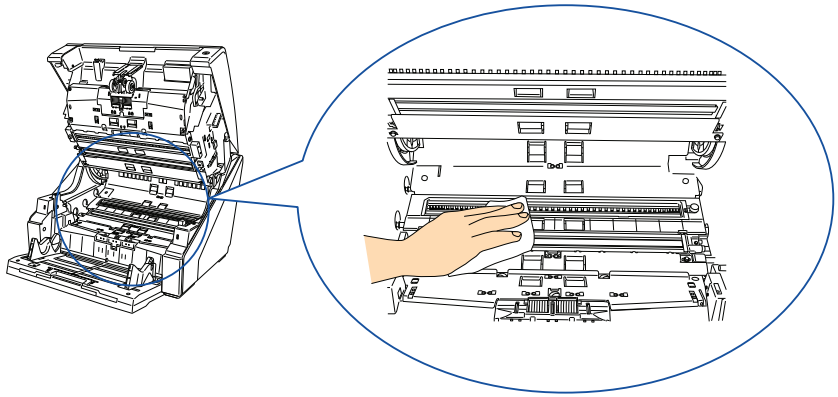
Paper Path/Sheet Guide

Clean the whole area quickly.

- Paper path upper-side



- Paper path lower-side

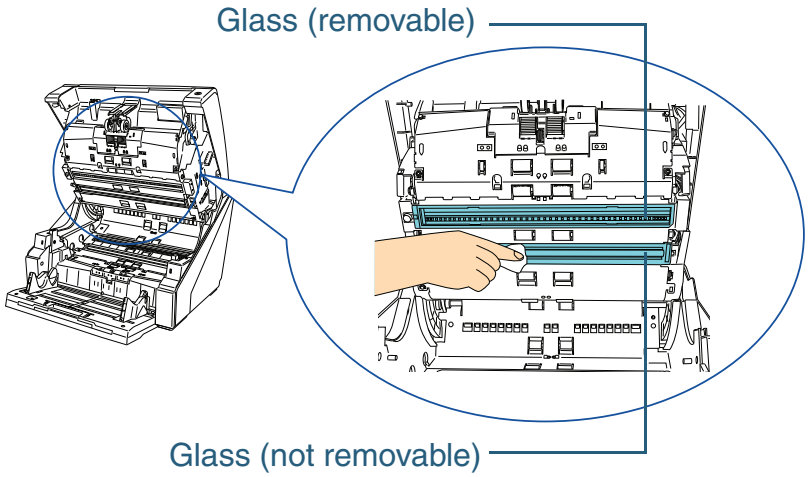


Use a vacuum cleaner if the paper path contains a lot of paper dust.

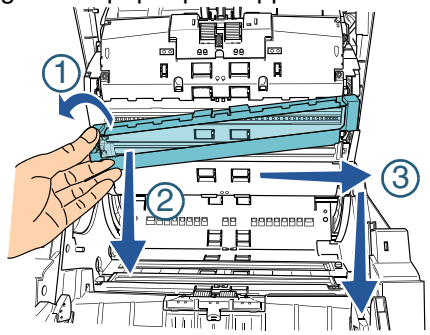
Scan Glass

Clean it lightly.

- Paper path upper-side (glasses: 2 sheets)



The glass should not have to be removed as it is designed to block paper dust. Remove and clean the glass only if the scanner is being used in an environment with large amounts of paper dust and vertical streaks appear on the scanned image even after cleaning the glass. Be careful not to let any paper dust in when removing the glass. Clean the glass on paper path upper-side as follows:



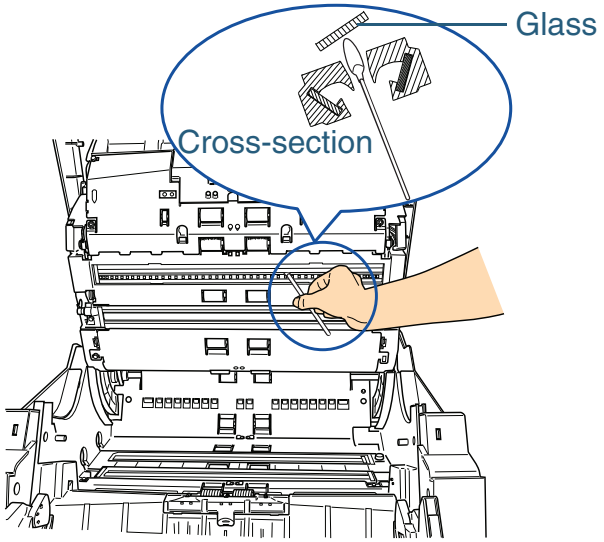
1 Loosen the screw until the glass can be lifted.

2 Tilt the glass to the angle as shown above.

3 Remove the glass as you slide it to the right.

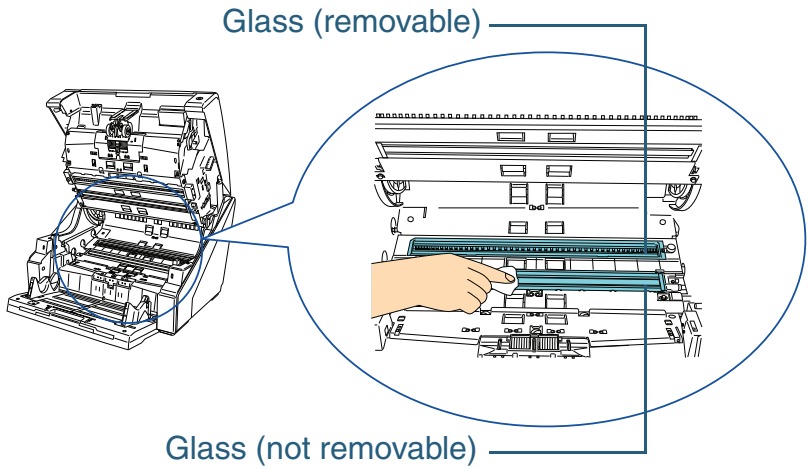
4 Clean the removed glass.

5 From the gap where the glass was attached, clean the other layer of glass inside, using a cotton swab or something alike.

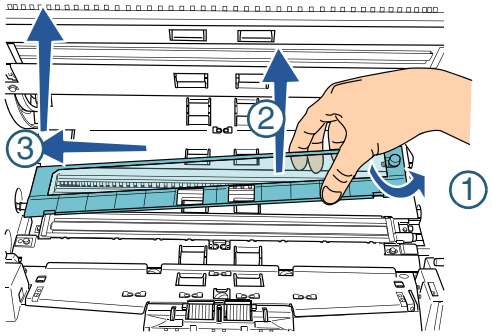


Vertical streaks may appear on the scanned image when the glass is dirty.

- Paper path lower-side (glasses: 2 sheets)

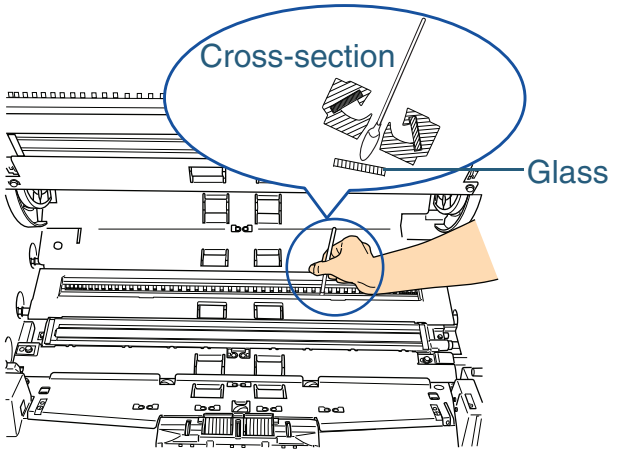


The glass should not have to be removed as it is designed to block paper dust. Remove and clean the glass only if the scanner is being used in an environment with large amounts of paper dust and vertical streaks appear on the scanned image even after cleaning the glass. Be careful not to let any paper dust in when removing the glass. Clean the glass on paper path lower-side as follows:



1 Loosen the screw until the glass can be lifted.
2 Tilt the glass to the angle as shown above.
3 Remove the glass as you slide it to the left.
4 Clean the removed glass.

5 From the gap where the glass was attached, clean the other layer of glass inside, using a cotton swab or something alike.

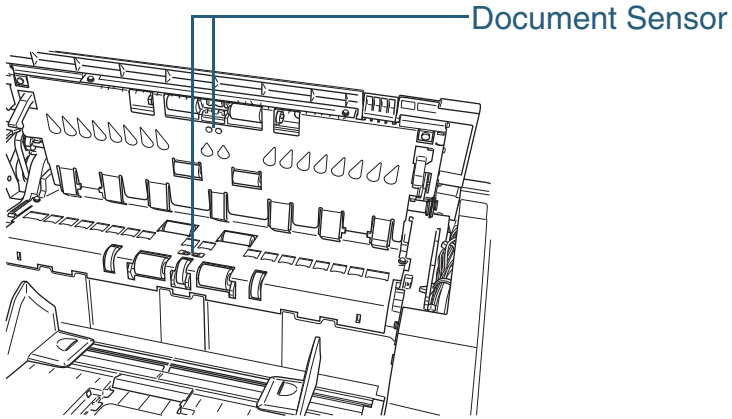


Vertical streaks may appear on the scanned image when the glass is dirty.

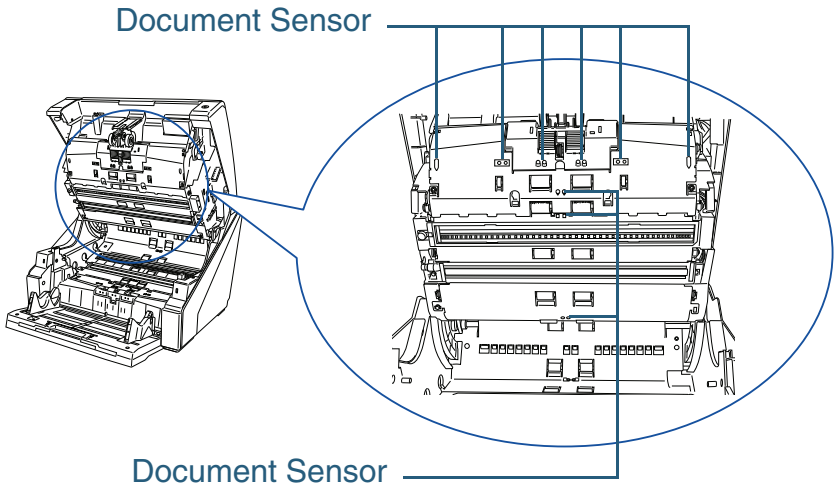
Document Sensor

Clean off the dust quickly.

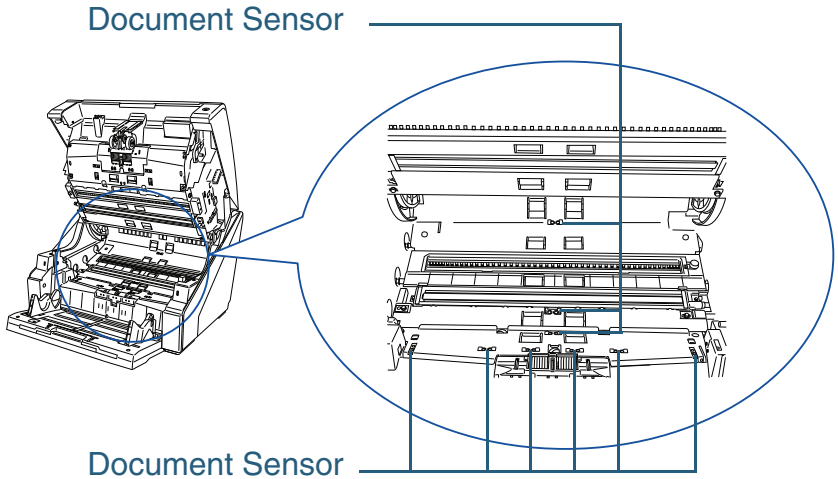
- Inside the top cover (sensors: 2 units)



- Paper path upper-side (sensors: 9 units)



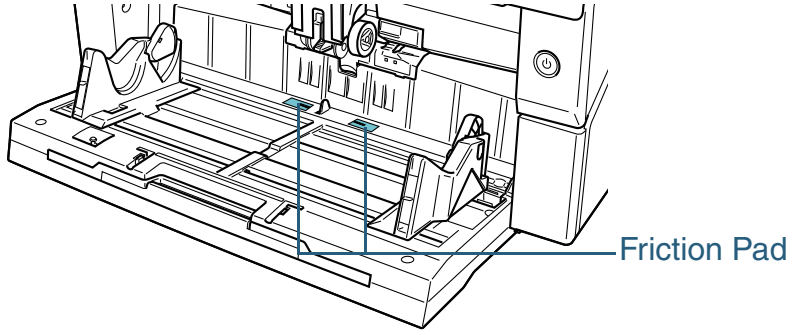
- Paper path lower-side (sensors: 9 units)



Friction Pad (2 units)

Quickly clean off the dust.

Friction pads are located on the hopper table.



4 Close the hopper/ADF/top cover.

For information on how to close the hopper, refer to "1.4 Opening/Closing the Hopper" (page 19).

For information on how to close the ADF, refer to "1.5 Opening/Closing the ADF" (page 20).

For information on how to close the top cover, refer to "1.6 Opening/Closing the Top Cover" (page 22).

> Confirm that the ADF is closed properly. You may not be able to perform scanning if the ADF is not closed properly.

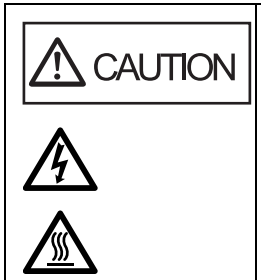
5 Reset the cleaning counter.

Reset the counter by one of the following methods.

- Select [23: Show/Clear Counters] from the [Main Menu] of the operator panel, then reset the counter.
  For more details, refer to "4.2 Main Menu" (page 65).
- Start up the Software Operation Panel and reset the counter. For more details, refer to "Resetting the counters" (page 186).

Chapter 7 Replacing Consumables

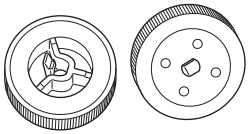
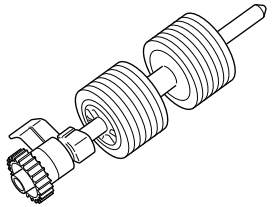
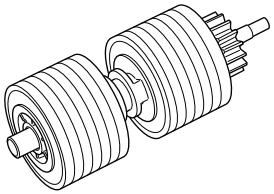
This chapter describes how to replace the consumables for the scanner.

	The glasses inside the ADF become very hot when the scanner is being used. Before you replace the consumables, make sure to turn off the power, unplug the power cable and wait at least 15 minutes for the ADF glass to cool down.

7.1 Consumables and Replacement Cycles....134
7.2 Replacing the Pick Roller....135
7.3 Replacing the Separator Roller....137
7.4 Replacing the Brake Roller....140

7.1 Consumables and Replacement Cycles

The following table shows the consumables used for the scanner.

Name	Part No.	Suggested replacement cycle
PICK ROLLER 	PA03575-K011	600,000 sheets or one year
SEPARATOR ROLLER 	PA03575-K012	600,000 sheets or one year
BRAKE ROLLER 	PA03575-K013	600,000 sheets or one year

Consumables must be replaced periodically. It is recommended that you keep a stock of new consumables and replace them before it reaches the end of the consumable life. The scanner records the number of sheets scanned after replacing the consumables (for pick roller, separator roller, brake roller), which allows you to check the status on each consumable.
To check the status on the usage of the consumables, refer to "9.3 Settings Related to Page Counters" (page 185).
Note that the suggested replacement cycles are guidelines for using A4 (80 g/m^2 [20 lb]) wood-free or wood containing papers, as these cycles vary depending on the type of papers scanned and how often the scanner is used and cleaned.

> Only use the specified consumables.

To purchase the consumables, contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

Please note that some parts (other than the consumables) need to be replaced by a service engineer, depending on the type of documents scanned and how often the scanner is used. For instance, Maintenance Parts (e.g. assist roller) need to be replaced by a service engineer. For more information, contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

7.2 Replacing the Pick Roller

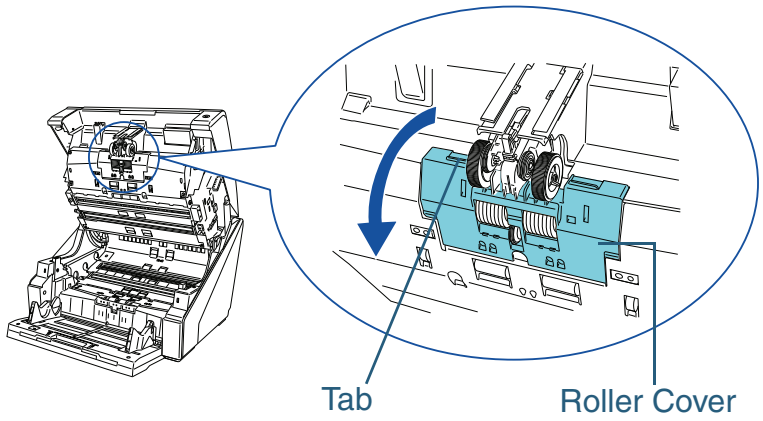
There are two pick rollers. Make sure to replace both two units.

1 Remove all documents from the stacker.

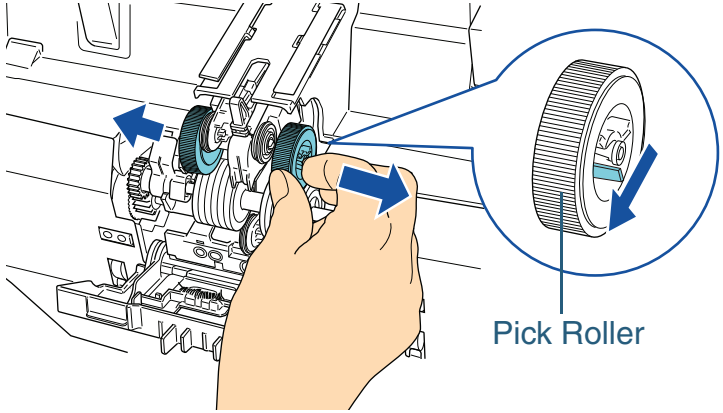
2 Open the ADF.
For information on how to open the ADF, refer to "1.5 Opening/Closing the ADF" (page 20).

CAUTION
Be careful not to have your fingers caught when the ADF closes.

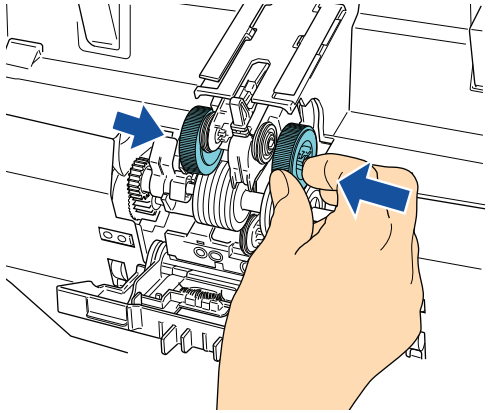
3 Remove the pick rollers (×2) from the scanner.
1 Open the roller cover. Grab the tabs on the left and right side with your fingers and pull down the cover towards you.



2 Pull the pick roller off the rotating shaft as you grab the tab on the pick roller (×2).



4 Install a new set of pick rollers (×2) in the scanner.
1 Place the pick rollers (×2) on the shaft.



2 Close the roller cover. Make sure that both ends of the cover are locked firmly.

5 Close the ADF.

For information on how to close the ADF, refer to "1.5 Opening/Closing the ADF" (page 20).

> **CAUTION** Be careful not to have your fingers caught when the ADF closes.

- Do not close the ADF while the roller cover is open.
- Confirm that the pick rollers are installed properly. When the pick rollers are not installed properly, it causes feeding errors such as paper jams.

6 Reset the pick roller counter.

Reset the counter by one of the following methods.

- Select [23: Show/Clear Counters] from the [Main Menu] on the operator panel, then reset the counter.
  For more details, refer to "4.2 Main Menu" (page 65).
- Start up the Software Operation Panel and reset the counter. For more details, refer to "Resetting the counters" (page 186).

7.3 Replacing the Separator Roller

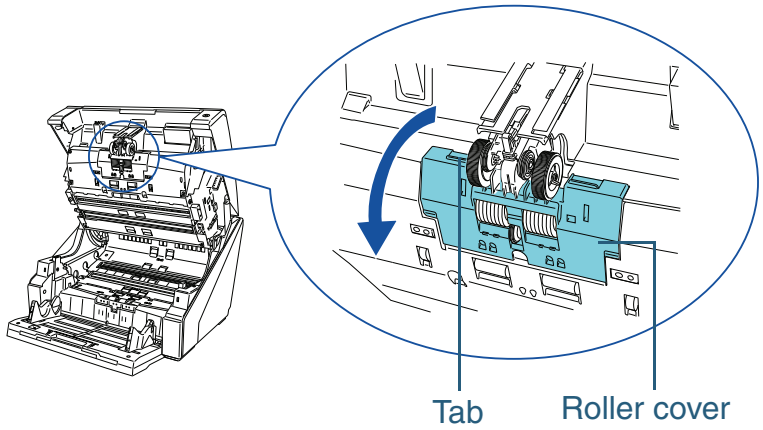
1 Remove all documents from the stacker.

2 Open the ADF.
For information on how to open the ADF, refer to "1.5 Opening/Closing the ADF" (page 20).

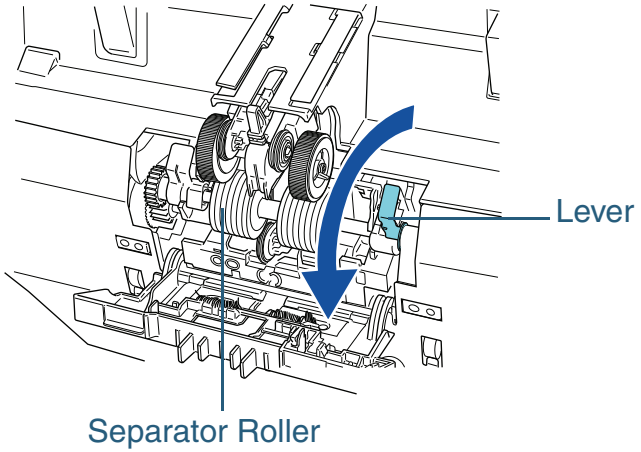
> ⚠ CAUTION
> Be careful not to have your fingers caught when the ADF closes.

3 Remove the separator roller from the scanner.

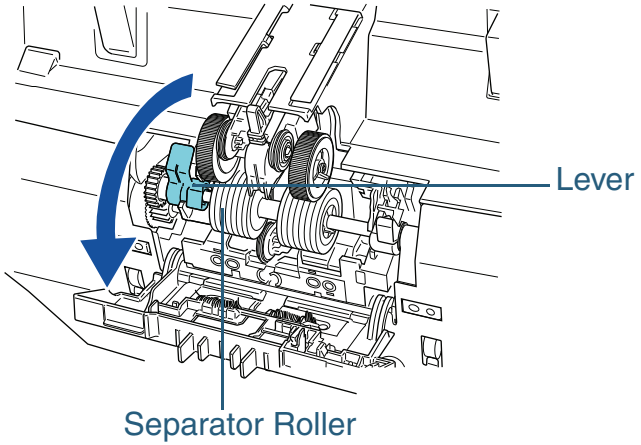
1 Open the roller cover. Grab the tabs on the left and right with your fingers and pull down the cover towards you.



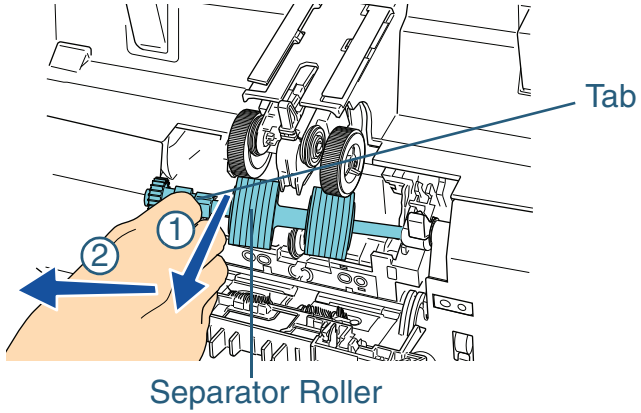
2 Pull down the lever which is located on the right-hand side of the separator roller.



3 Pull down the lever which is located on the left-hand side of the separator roller.

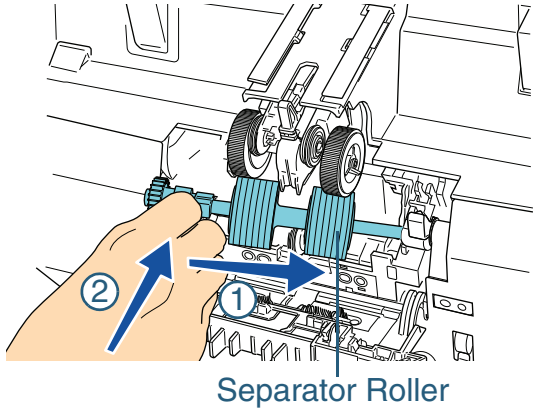


4 Pull the lever on the left side of the separator roller towards you, and remove it with the shaft.

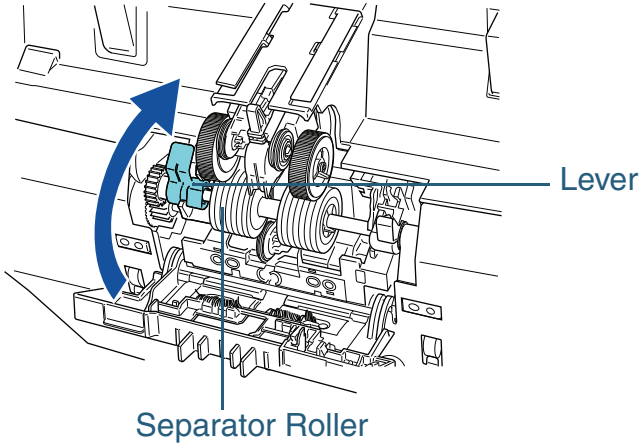


4 Install a new separator roller on the scanner.

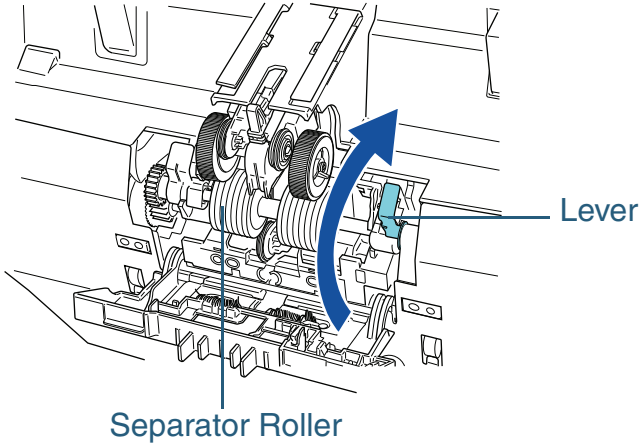
1 Install the separator roller. Insert the right side of the shaft first, then the left side so that the tab fits in the groove.



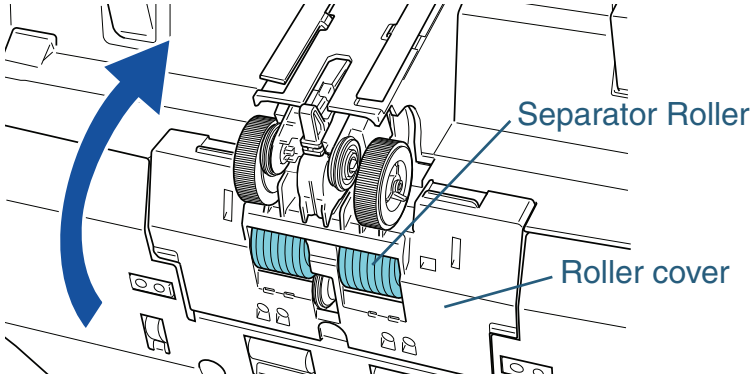
2 Push up the lever which is located on the left side of the separator roller.



3 Push up the lever which is located on the right side of the separator roller.



4 Close the roller cover. Make sure that both ends of the cover are locked firmly.



5 Close the ADF.

For information on how to close the ADF, refer to "1.5 Opening/Closing the ADF" (page 20).

> **CAUTION** Be careful not to have your fingers caught when the ADF closes.

- Do not close the ADF while the roller cover is open.
- Confirm that the separator roller is installed properly. When the separator roller is not installed properly, it causes feeding errors such as paper jams.

6 Reset the separator roller counter.

Reset the counter by one of the following methods.

- Select [23: Show/Clear Counters] from the [Main Menu] on the operator panel, then reset the counter.
  For more details, refer to "4.2 Main Menu" (page 65).
- Start up the Software Operation Panel and reset the counter. For more details, refer to "Resetting the counters" (page 186).

7.4 Replacing the Brake Roller

1 Remove all documents from the stacker.

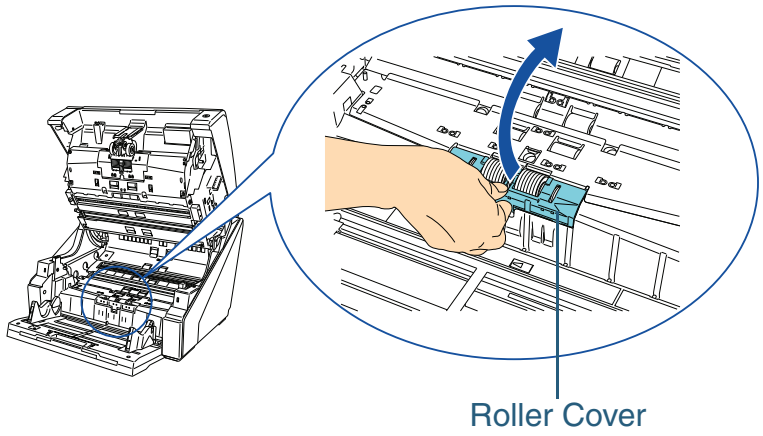
2 If the hopper has been raised, bring it back down to the lower position.
For information on how to adjust the hopper level, refer to "1.7 Setting the Loading Capacity of the Hopper" (page 23).

3 Open the ADF.
For information on how to open the ADF, refer to "1.5 Opening/Closing the ADF" (page 20).

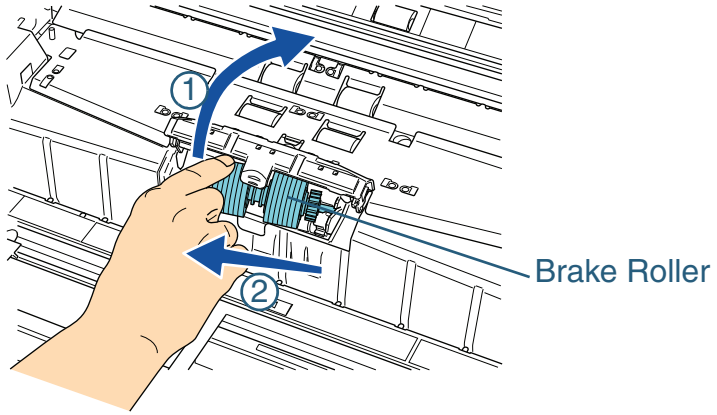
> ⚠ CAUTION
> Be careful not to have your fingers caught when the ADF closes.

4 Remove the brake roller from the scanner.

1 Open the roller cover. Lift up the cover from the lower middle.

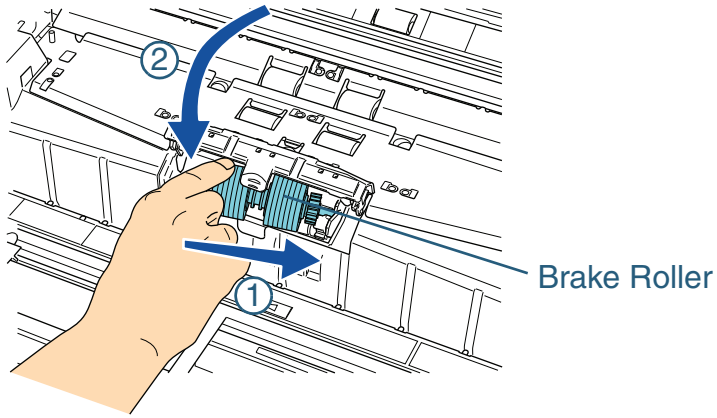


2 Remove the brake roller. Lift the left side of the roller first, then pull out the shaft from left to right.



5 Install a new brake roller on the scanner.

1 Install the brake roller. Insert the shaft from the right side to the left.



2 Close the roller cover. Make sure that both ends of the cover are locked firmly.

6 Close the ADF.

For information on how to close the ADF, refer to "1.5 Opening/Closing the ADF" (page 20).

> **CAUTION** Be careful not to have your fingers caught when the ADF closes.

- Do not close the ADF while the roller cover is open.
- Confirm that the brake roller is installed properly. When the brake roller is not installed properly, it causes feeding errors such as paper jams.

7 Reset the brake roller counter.

Reset the counter by one of the following methods.

- Select [23: Show/Clear Counters] from [Main Menu] on the operator panel, then reset the counter.
  For more details, refer to "4.2 Main Menu" (page 65).
- Start up the Software Operation Panel and reset the counter.
  For more details, refer to "Resetting the counters" (page 186).

Chapter 8 Troubleshooting

This chapter explains about the countermeasures against paper jams and other troubles, items to check before contacting your scanner service provider, and how to read the product labels on the scanner.

For details about other errors/troubles not mentioned in this chapter, refer to the TWAIN Scanner Driver Help.

8.1 Paper Jam 143
8.2 Error Indications on Operator Panel 145
8.3 Troubleshooting 154
8.4 Before You Contact the Scanner Service Provider 169
8.5 Checking the Product Labels 171

8.1 Paper Jam

When your document is jammed inside the scanner, remove the document in the following manner.

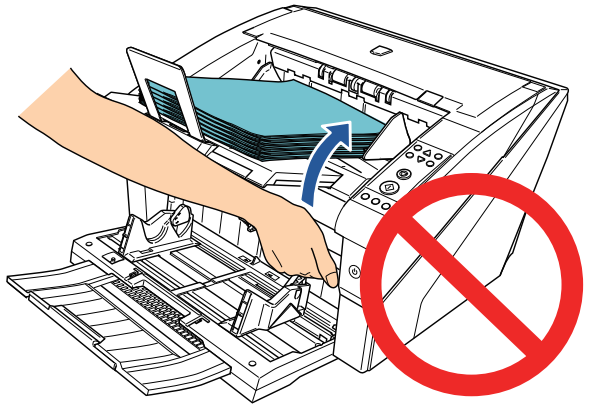
CAUTION

- Be careful of injuries upon removing jammed documents.
- Be careful not to get your accessories (e.g. tie, necklace) caught inside the scanner upon removing jammed documents.
- Be careful of burns as the glass and the guides may become extremely hot during operation.

1 Remove all documents remaining on the stacker.

CAUTION

Do not open the ADF when there is a large volume of documents left on the stacker.
You may have your fingers caught if the ADF closes from the weight of the documents.



2 Open the ADF/top cover.

For information on how to open the ADF, refer to "1.5 Opening/Closing the ADF" (page 20).

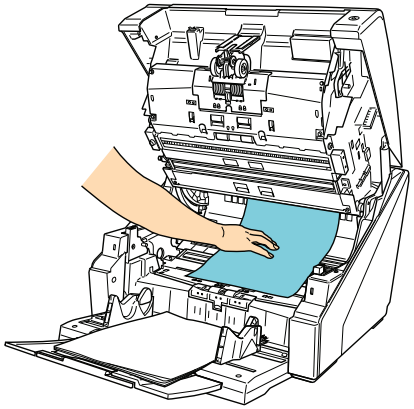
For information on how to open the top cover, refer to "1.6 Opening/Closing the Top Cover" (page 22).

CAUTION

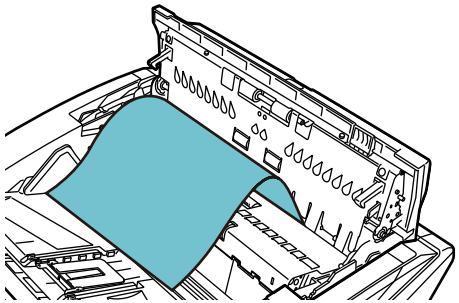
Be careful not to have your fingers caught when the ADF/top cover closes.

3 Remove the jammed document.

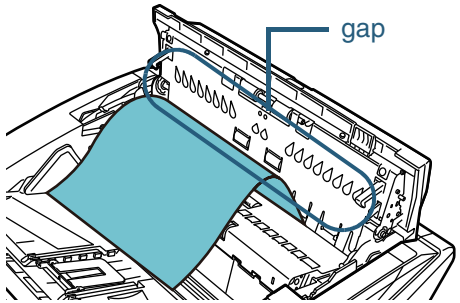
- Inside ADF



- Inside top cover



- When a document is jammed in the paper path, be careful not to damage the document if you are pulling it out from the ADF side which is against the feeding direction. Especially for documents that are not flat (e.g. with holes, tapes), they can be removed more smoothly from the top cover side.
- Make sure to check the documents and the paper path thoroughly and remove all staples and paper clips as they cause paper jams.
- Be careful not to damage the glass surface and the guides when removing documents with staples or paper clips.
- Be careful not to have the document caught in the small gap as shown in the picture below, because there is little space in the paper path.



4 Close the ADF/top cover.

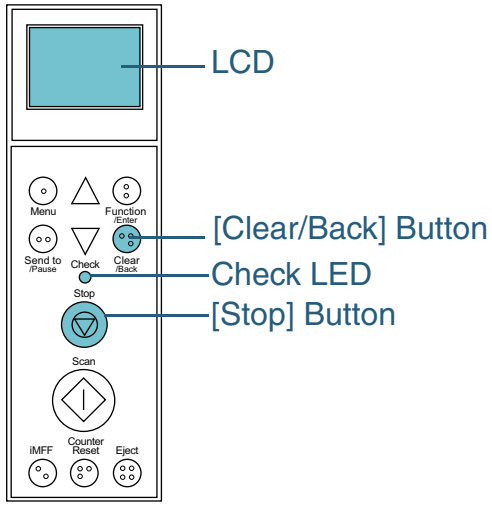
For information on how to close the ADF, refer to "1.5 Opening/Closing the ADF" (page 20).

For information on how to close the top cover, refer to "1.6 Opening/Closing the Top Cover" (page 22).

- Confirm that the ADF is closed properly. You may not be able to perform scanning if the ADF is not closed properly.
- Occasionally when scanning is completed or canceled, documents may remain in the ADF without any error message displayed. In such cases, remove the documents by following the above steps 1 to 4.

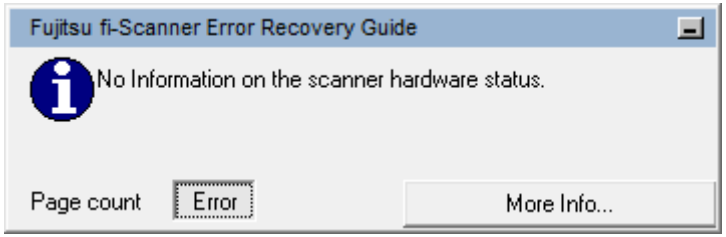
8.2 Error Indications on Operator Panel

When an error occurs, the Check LED lights in orange. Error codes displayed on the LCD begin with the letter "J" or "U" for temporary errors and "E", "F", "C", "H", "A" or "L" for device errors. Temporary errors can be recovered by the operator, whereas device errors require a service engineer to recover from. You can clear the error display by pressing the [Clear/Back] or the [Stop] button. Note that if the error is “Paper jam”, the message disappears after a certain amount of time elapses with no documents ([Ready] status) in the scanner.



If the Error Recovery Guide is installed in your computer, the Error Recovery Guide window appears when the Windows operating system is started up. When an error or a malfunction occurs, the Error Recovery Guide window displays related information such as the name of the error and the error code (number).

Write down the information shown in the window and click the [More Info] button to check for troubleshooting methods.



When you scan a lot of documents written with lead pencil, the following message may appear:
“Clean the consumables (brake roller, separator roller and pick roller) because they may be dirty. Also try pressing the ▽ button to lower the paper separation force when [Ready] is displayed. If this message keeps on appearing, replace the consumables. Refer to the manual for information on how to clean or replace the consumables.”
This message only appears on the operator panel without an error code.
Troubleshoot as instructed in the message.
For information on how to clean the consumables, refer to "Chapter 6 Daily Care" (page 121).
For information on how to adjust the paper separation force, refer to "1.9 Adjusting the Paper Separation Force" (page 26).
For information on how to replace the consumables, refer to "Chapter 7 Replacing Consumables" (page 133).

Error Recovery Guide is included in the Setup DVD-ROM.
For information on how to install the Error Recovery Guide, refer to "Installing the Scanner Software" in “Getting Started”.

Temporary Errors

The following are lists of temporary errors which can be recovered by operators.

■ Paper feeding errors

Error codes beginning with the letter "J" are displayed.

Error code	Error message	Countermeasure
J1:31 J1:32 J1:34 J1:35 J1:3A J1:3B J1:3C J1:3D J1:3E	Paper jam Remove the document and try again.	1 Remove the jammed document(s). For information on how to remove documents, refer to "8.1 Paper Jam" (page 143). 2 Check if the documents are suitable for scanning by ADF. For more details, refer to "2.2 Documents for Scanning" (page 40). 3 Clean the rollers. For more details, refer to "Chapter 6 Daily Care" (page 121).
J1:50	Paper jam Remove the document and try again.	1 Remove the jammed document(s). For information on how to remove documents, refer to "8.1 Paper Jam" (page 143). 2 Check if the documents are suitable for scanning by ADF. For more details, refer to "2.2 Documents for Scanning" (page 40).
J0:51	Paper jam Remove the document and try again.	1 Remove the jammed document(s). For information on how to remove documents, refer to "8.1 Paper Jam" (page 143). 2 Check if any bent/warped documents or thin papers that do not meet the specification are mixed in the batch. For more details, refer to "2.2 Documents for Scanning" (page 40).

Error code	Error message	Countermeasure
J0:52	Paper jam Remove the document and try again.	1 Remove the jammed document(s). For information on how to remove documents, refer to "8.1 Paper Jam" (page 143). 2 Check if the documents are suitable for scanning by ADF. For more details, refer to "2.2 Documents for Scanning" (page 40). 3 Clean the rollers. For more details, refer to "Chapter 6 Daily Care" (page 121).
J3:54	Skew detected Remove the document and try again.	1 Remove the jammed document(s). For information on how to remove documents, refer to "8.1 Paper Jam" (page 143). 2 Make sure that the hopper side guides are not set too wide.

Error code	Error message	Countermeasure
J2:55	Multifeed detected (Overlap) Press the iMFF button to eject the document and to suppress multifeed detection from next scans. Press the Eject button just to eject the document. When [Ready] is displayed, increase the paper separation force by using the [△] button to suppress multifeeds. (*1)	When you press the [Eject] button on the operator panel, the multifed documents are ejected.
	Multifeed detected (Overlap) Press the Eject button to eject the document. When [Ready] is displayed, increase the paper separation force by using the [△] button to suppress multifeeds. (*1)	

Error code	Error message	Countermeasure
J2:55	Multifeed detected (Overlap) Press the iMFF button to memorize the multifeed pattern and eject document. Press the Eject button to eject the document. When [Ready] is displayed, increase the paper separation force by using the [△] button to suppress multifeeds. (*1)	When you press the [Eject] button on the operator panel, the multifed documents are ejected.
	Multifeed detected (Overlap) Press the iMFF button to memorize the multifeed pattern. Press the Eject button to eject the document. When [Ready] is displayed, increase the paper separation force by using the [△] button to suppress multifeeds. (*1)	
J2:56	Multifeed detected (Length) Press the Eject button to eject the document.	
J8:01	Sensor(s) dirty Clean the Pick Sensor.	Clean the sensor(s). For details, refer to "Chapter 6 Daily Care" (page 121).
J8:02	Sensor(s) dirty Clean the Skew Sensor.	
J8:03	Sensor(s) dirty Clean the FEED-TOP Sensor.	
J8:04	Sensor(s) dirty Clean the READ-TOP Sensor.	

Error code	Error message	Countermeasure
J8:05	Sensor(s) dirty Clean the IMP-TOP Sensor.	Clean the sensor(s). For more details, refer to "Chapter 6 Daily Care" (page 121).
J8:06	Sensor(s) dirty Clean the EXIT Sensor.	
J8:07	Sensor(s) dirty Clean the JAM Sensor.	
J9:61	Pick roller error Pull down the Pick Roller Unit to its correct position. Remove excess documents from the hopper.	Make sure that you do not have too many documents on the hopper and the pick roller unit is not fixed in upper position.
J9:64	Brake roller/separator roller(s) not installed correctly Set the Brake Roller/Separator Roller(s) unit correctly.	Check if the separator roller or the brake roller is set correctly. For information on how to check the rollers, refer to "7.3 Replacing the Separator Roller" (page 137) or "7.4 Replacing the Brake Roller" (page 140).

*1: When the paper separation force is set to [■■■■■] which is the maximum level, the message “When [Ready] is displayed, increase the paper separation force by using the [△] button to suppress multifeeds.” does not appear.

Cover Open and Print Errors

Error codes beginning with the letter "U" are displayed.

Error code	Error message	Countermeasure
U4:40 (*1)	ADF open	Close the ADF or the top cover, and reload the documents.
U4:41 (*1)	Top cover open	
U6:B4	Print cartridge not installed (back-side imprinter) Check if the Print Cartridge is mounted correctly.	This error is related to the imprinter (sold separately). Install the print cartridge. For more details, refer to "fi-680PRF/PRB Imprinter Operator's Guide".
U6:BA	Print cartridge not installed (front-side imprinter) Check if the Print Cartridge is mounted correctly.	

*1: When you open the ADF or top cover while the scanner is ready, only an error message will appear without an error code. Also, note that buttons on the operator panel are disabled while the ADF or top cover is open.

Device Errors

The following are lists of device errors which require troubleshooting by a service engineer.

Internal Error, Optical Error

Error codes beginning with the letter "E" are displayed.

Error code	Error message	Countermeasure
E8:8E	SCSI error If the problem persists after turning the power back on, please inform your service engineer of the above error code.	Turn the power off then back on. If this method does not solve the problem, write down the displayed error code and contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.
E7:D2	EEPROM error If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
E6:D3	Operator Panel error If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
E5:EB	Flash error If the problem persists after turning the power back on, please inform your service engineer of the above error code.	

Error code	Error message	Countermeasure
E9:F5	Image memory read-write error (Front) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	Turn the power off then back on. If this method does not solve the problem, write down the displayed error code and contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.
E9:F6	Image memory read-write error (Back) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
E9:F7	Extended image memory read-write error (Front) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
E9:F8	Extended image memory read-write error (Back) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	

Error code	Error message	Countermeasure
E2:74	Optical error (ADF Front) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	Turn the power off then back on. If this method does not solve the problem, write down the displayed error code and contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.
E3:75	Optical error (ADF Back) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	

■ Overrun Error, Fan Error

Error codes beginning with the letter "F" are displayed.

Error code	Error message	Countermeasure
F0:C0	Hopper malfunction If the problem persists after turning the power back on, please inform your service engineer of the above error code.	1 Make sure that there is nothing beneath the hopper. 2 Confirm that the hopper is not closed with the pick roller unit in upper position. 3 Turn the power off then back on. If this method does not solve the problem, write down the displayed error code and contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

Error code	Error message	Countermeasure
F1:C1	Stacker malfunction If the problem persists after turning the power back on, please inform your service engineer of the above error code.	Turn the power off then back on. If this method does not solve the problem, write down the displayed error code and contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.
F4:C2	Background switching mechanism error (ADF Front) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
F4:C3	Background switching mechanism error (ADF Back) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
F6:EC	Fan error If the problem persists after turning the power back on, please inform your service engineer of the above error code.	

Chip Error

Error codes beginning with the letter "C" are displayed.

Error code	Error message	Countermeasure
C0:E5	Memory error (Front) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	Turn the power off then back on. If this method does not solve the problem, write down the displayed error code and contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.
C0:E6	Memory error (Back) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
C0:E9	LSI error (Front) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
C0:EA	LSI error (Back) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
C8:F0	Internal communication error of the scanner If the problem persists after turning the power back on, please inform your service engineer of the above error code.	

Error code	Error message	Countermeasure
C6:EF	SPC Error If the problem persists after turning the power back on, please inform your service engineer of the above error code.	Turn the power off then back on. If this method does not solve the problem, write down the displayed error code and contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.
C6:F9	USB Error If the problem persists after turning the power back on, please inform your service engineer of the above error code.	

■ Lamp Circuit Error, Motor Circuit Error

Error codes beginning with the letter "H" are displayed.

Error code	Error message	Countermeasure
H7:84	Lamp circuit error (Front) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	Turn the power off then back on. If this method does not solve the problem, write down the displayed error code and contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.
H7:85	Lamp circuit error (Back) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	

Error code	Error message	Countermeasure
H1:80 H2:81 H2:82 H5:86 H8:88 H9:89 H1:8A H1:8B H3:8C H4:8D H2:8F H2:90	Motor circuit error If the problem persists after turning the power back on, please inform your service engineer of the above error code.	Turn the power off then back on. If this method does not solve the problem, write down the displayed error code and contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.
H9:91	CCD 24V error If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
H6:B1	Imprinter system error If the problem persists after turning the power back on, please inform your service engineer of the above error code.	

Scanner Option Error (only when imprinter is installed)

Error codes beginning with the letter "A" are displayed.

Error code	Error message	Countermeasure
A0:B2	Imprinter error (RAM) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	1 Check if the Print Cartridge is installed correctly. For more details, refer to the "fi-680PRF/ PRB Imprinter Operator's Guide". 2 Turn the power off then back on. If this method does not solve the problem, write down the displayed error code and contact your FUJISU scanner dealer or an authorized FUJITSU scanner service provider.
A1:B3	Imprinter error (communication timeout) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
A2:B5	Imprinter error (back-side print head) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
A3:B6	Imprinter error (EEPROM) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	
A4:B8	Imprinter error (ROM) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	1 Check if the print cartridge is installed correctly. For more details, refer to the “fi-680PRF/ PRB Imprinter Operator's Guide”. 2 Turn the power off then back on. If this method does not solve the problem, write down the displayed error code and contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.
A2:BB	Imprinter error (front-side print head) If the problem persists after turning the power back on, please inform your service engineer of the above error code.	

Sensor Error

Error codes beginning with the letter "L" are displayed.

Error code	Error message	Countermeasure
L0:11 L1:12 L2:13 L3:14 L4:15 L5:17 L6:1B L7:1C	Sensor error If the problem persists after turning the power back on, please inform your service engineer of the above error code.	Turn the power off then back on. If this method does not solve the problem, write down the displayed error code and contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

8.3 Troubleshooting

This section describes troubles that may occur while using the scanner, and the troubleshooting methods. Please check the following items before you request a repair. If the problem persists, check each item in "8.4 Before You Contact the Scanner Service Provider" (page 169), and then contact your FUJITSU scanner dealer where you purchased the scanner, or an authorized FUJITSU scanner service provider.

The following are examples of troubles that you may experience:

Symptoms
"Scanner cannot be powered ON." (page 155)
"Display on LCD switches OFF." (page 156)
"Scanning does not start." (page 157)
"Quality of the scanned photo/picture is poor when scanning in black & white." (page 158)
"Quality of scanned text or lines is unsatisfactory." (page 159)
"Images are distorted or not clear." (page 160)
"Vertical streaks appear on the scanned image." (page 161)
"Multifeed error occurs frequently." (page 162)
"Situation in which the document is not fed into the ADF occur frequently." (page 164)
"Paper jams/pick errors occur frequently." (page 165)
"Scanned images turn out elongated." (page 166)
"A shadow appears on the leading edge of the scanned image." (page 167)
"Scanner is not recognized by the computer when using Kofax VRS." (page 168)

Scanner cannot be powered ON.

Is the power cable connected properly?

→ No: Connect the power cable properly.

Yes ↓

Is the main power switch turned on?

→ No: Press the [|] side of the main power switch.

Yes ↓

Did you press the power button on the front?

→ No: Press the power button.

Yes →

If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

Display on LCD switches OFF.

Has the scanner been left out of operation for a long time after being powered on?

Yes → The scanner is in power saving mode.
Resume from power saving mode by one of the following methods.

- Load a document on the hopper.
- Press any button on the operator panel. However, do not press the power button for more than two seconds because it will turn the power off.
- Execute a command from the scanner driver.

No ↓

Is the display still turned off even after you turned the power back on?

No → The scanner is operating correctly.

Yes → If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

Scanning does not start.

Are the documents set on the hopper correctly?
- No → Reload the documents on the hopper.
- Yes ↓

Is the ADF closed properly?
- No → Remove documents from the hopper, then open and close the ADF.
- Yes ↓

Is the interface cable connected correctly?
- No → Connect the interface cable properly.
  For information on how to connect the cables, refer to “Connecting Cables” in “Getting Started”.
- Yes ↓

Is the connector on the interface cable broken?
- Yes → Use a new interface cable.
- No ↓

Is the SCSI ID configured correctly?
(when connected via SCSI cable)
- No → Turn off the scanner and the computer. Then specify a correct SCSI ID, turn the scanner back on, and restart the computer.
  For information on how to configure the SCSI ID, refer to [Connecting Cables] in “Getting Started”.
- Yes ↓

Does the scanning start after turning the scanner back on?
- Yes → The scanner is operating normally.
- No → If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

Quality of the scanned photo/picture is poor when scanning in black & white.

Are you scanning in "Halftone" or "Grayscale"?

No → Select [Halftone] or [Grayscale] in the scanner driver and scan.(*1)

Yes ↓

Are the glasses inside the ADF clean?

No → Clean the dirty locations.
For information on how to clean the dirty locations, refer to "Chapter 6 Daily Care" (page 121).

Yes →

If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

*1: The scanned image may differ from the original image significantly if you simply "binarize" (output in black & white) a picture or a photo. If you can configure from the scanner driver settings dialog box, specify the image mode to [Halftone] or [Grayscale] and scan.

Quality of scanned text or lines is unsatisfactory.

Are the glasses and rollers inside the ADF clean?

No → Clean the dirty locations.
For information on how to clean the dirty locations, refer to "Chapter 6 Daily Care" (page 121).

Yes ↓

Is the resolution appropriate?

No → Specify a higher resolution in the scanner driver.

Yes ↓

Is [Binary (black and white)] mode selected?

No → Select [Binary (black and white)] in the scanner driver.(*1)

Yes ↓

Is there any foreign matter (e.g. dust, paper dust) on the document?

Yes → Remove any foreign matter off the document.
Such foreign matter on the document may be transferred onto the glasses inside the ADF and cause the images to become dirty.

No →

If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

*1: When scanning in halftone, grayscale or color, the scanned image may not become sharp and clear. If it can be configured in the scanner driver's setup dialog box, set the image mode to [Binary (black and white)].

Images are distorted or not clear.

Are the glasses and rollers inside the ADF clean?

No → Clean the dirty locations.
For information on how to clean the dirty locations, refer to "Chapter 6 Daily Care" (page 121).

Yes ↓

Is the top of the ADF being pushed down during scanning? Is there a heavy object placed on top of the ADF?

Yes → Do not press down on the top of the ADF or place any heavy objects on the ADF during scanning.

No ↓

Is anything causing the scanner to vibrate during scanning?

Yes → Do not allow the scanner to vibrate during scanning.

No ↓

Is the scanner placed on a flat and level surface? Also, are there rubber pads attached on the bottom of the scanner?

No → Either place the scanner on a flat and level surface, or attach the rubber pads on the bottom of the scanner.

Yes →

If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

Vertical streaks appear on the scanned image.

Do the vertical streaks (lines) always appear in the same location?

Yes → Clean the glasses and rollers inside the ADF.
For information on how to clean the glasses and each roller inside the ADF, refer to "6.2 Cleaning the ADF (with Cleaning Sheet)" (page 124) or "6.3 Cleaning the ADF (with cloth)" (page 126).

No ↓

Does the vertical streak (line) disappear when you set a lower resolution?

Yes → Specify a lower resolution and scan the document.

No ↓

Is there any foreign matter (e.g. dust, paper dust) on the document?

Yes → Remove any foreign matter off the document.
Such foreign matter on the document may be transferred onto the glasses inside the ADF and cause the images to become dirty.

No → If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

Multifeed error occurs frequently.

Does the condition of the documents fulfill the requirements described in "Precautions" in "Paper Quality" (page 40)?

- No → Use a document that satisfies the required conditions.
  For more details, refer to "2.2 Documents for Scanning" (page 40).
- Yes ↓

When the multifeed detection is set to ON, do the settings satisfy the requirement to accurately detect multifeed?

- No → Configure a setting that fulfills the conditions to detect multifeed accurately.
  For conditions on multifeed detection, refer to "Conditions for Multifeed Detection" (page 44).
  Specify a range for multifeed detection if necessary ("Detecting Multifeed Errors" (page 115)).
- Yes ↓

Did you fan the documents before loading them on the scanner?

- No → Fan the documents before loading.
- Yes ↓

Has the document just been printed out from a copier or a laser printer?

- Yes → Fan the documents three to four times to remove static electricity.
- No ↓

Is the document stack thinner than 50 mm?

- No → Reduce the amount of sheets.
- Yes ↓

Does the document stack weigh less than 5 kg?

- No → Reduce the amount of sheets.
- Yes ↓

Are the consumables (*1) installed correctly?

- No → Install the consumables (*1) correctly.
  For information on how to install the consumables, refer to "Chapter 7 Replacing Consumables" (page 133).
- Yes ↓

Are any of the consumables (*1) dirty?

- Yes → Clean the consumables (*1).
  For more information on cleaning, refer to "6.2 Cleaning the ADF (with Cleaning Sheet)" (page 124) or "6.3 Cleaning the ADF (with cloth)" (page 126).
- No ↓

Are any of the consumables (*1) worn out?

- Yes → Check the Consumables Counter. Replace the consumables if necessary.
  For information on how to replace the consumables, refer to "Chapter 7 Replacing Consumables" (page 133).
- No ↓

Did you adjust the paper separation force on the operator panel?

No → Increase the paper separation force if it is set low.
For more details, refer to "1.9 Adjusting the Paper Separation Force" (page 26).

Yes → If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

*1: "Consumables" refers to the pick roller, separator roller and brake roller.

Situation in which the document is not fed into the ADF occur frequently.

Does the condition of the documents fulfill the requirements described in "Paper Quality" (page 40)?

No → Use a document that satisfies the required conditions.
For more details, refer to "2.2 Documents for Scanning" (page 40).

Yes ↓

Did you fan the documents before loading them on the hopper?

No → Fan the documents before loading, or reduce the amount of sheets.

Yes ↓

Are the consumables (*1) installed correctly?

No → Install the consumables (*1) correctly.
For information on how to install the consumables, refer to "Chapter 7 Replacing Consumables" (page 133).

Yes ↓

Are any of the consumables (*1) dirty?

Yes → Clean the consumables (*1).
For more details, refer to "6.2 Cleaning the ADF (with Cleaning Sheet)" (page 124) or "6.3 Cleaning the ADF (with cloth)" (page 126)

No ↓

Are any of the consumables (*1) worn out?

Yes → Check the Consumables Counter. Replace the consumables if necessary.
For information on how to replace the consumables, refer to "Chapter 7 Replacing Consumables" (page 133).

No → If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

*1: "Consumables" refers to the pick roller, separator roller and brake roller.

Paper jams/pick errors occur frequently.

Does the condition of the documents fulfill the requirements described in "Paper Quality" (page 40)?

No → Use a document that satisfies the required conditions.
For more details, refer to "2.2 Documents for Scanning" (page 40).

Yes ↓

Has any foreign matter entered inside the ADF?

Yes → Clean or remove any foreign matter from the ADF.
For information on cleaning, refer to "6.2 Cleaning the ADF (with Cleaning Sheet)" (page 124) or "6.3 Cleaning the ADF (with cloth)" (page 126).

No ↓

Are the consumables (*1) installed correctly?

No → Install the consumables (*1) correctly.
For information on how to install the consumables, refer to "Chapter 7 Replacing Consumables" (page 133).

Yes ↓

Are any of the consumables (*1) dirty?

Yes → Clean the consumables (*1).
For information on cleaning, refer to "6.2 Cleaning the ADF (with Cleaning Sheet)" (page 124) or "6.3 Cleaning the ADF (with cloth)" (page 126).

No ↓

Are any of the consumables (*1) worn out?

Yes → Check the consumable counters. Replace the consumables if necessary.
For information on how to replace the consumables, refer to "Chapter 7 Replacing Consumables" (page 133).

No ↓

Did you adjust the paper separation force on the operator panel?

No → Lower the paper separation force if it is set high.
For information on how to adjust the paper separation force, refer to "1.9 Adjusting the Paper Separation Force" (page 26).

Yes →

If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

*1: "Consumables" refers to the pick roller, separator roller and brake roller.

Scanned images turn out elongated.

Are the rollers dirty?

Yes → Clean the rollers.
For more information on cleaning, refer to "6.2 Cleaning the ADF (with Cleaning Sheet)" (page 124) or "6.3 Cleaning the ADF (with cloth)" (page 126).

No ↓

Does the condition of the documents fulfill the requirements described in "Precautions" in "Paper Quality" (page 40)?

No → Use a document that satisfies the required conditions.
For more details, refer to "2.2 Documents for Scanning" (page 40).

Yes ↓

Are any of the consumables (*1) worn out?

Yes → Check the consumable counters. Replace the consumables if necessary.
For information on how to replace consumables, refer to "Chapter 7 Replacing Consumables" (page 133).

No ↓

Have you adjusted [Offset/Vertical Magnification Adjustment]?

No → In [Hardware Setting] of the Software Operation Panel, adjust the scan scale in the feeding direction.
For more details, refer to "Adjusting the Starting Position for Scanning [Offset/Vertical Magnification Adjustment]" (page 189).

Yes → If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

*1: "Consumables" refers to the pick roller, separator roller and brake roller.

A shadow appears on the leading edge of the scanned image.

Have you adjusted the offset (starting position for scanning)?

→ No

In [Device Setting] of the Software Operation Panel, adjust the offset in the sub-scanning direction.
For more details, refer to "Adjusting the Starting Position for Scanning [Offset/Vertical Magnification Adjustment]" (page 189).

↓ Yes

Did you use the filtering function?

→ No

In [Device Setting 2] of the Software Operation Panel, use the filtering function to fill out the shadow that appeared on the edge of the document.
For more details, refer to "Eliminating Shadows or Streaks on the Scanned Image Edge [Page Edge Filler (ADF)]" (page 191).

↓ Yes

If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

Scanner is not recognized by the computer when using Kofax VRS.

Is the interface cable connected correctly?

No → Connect the interface cable correctly.
For information on how to connect the cables, refer to “Connecting Cables” in “Getting Started”.

Yes ↓

Is it connected via SCSI/USB Connector 2?

No → Connect via SCSI or USB Connector 2.

Yes ↓

Is the SCSI ID set to a number other than "9"?

No → Configure the SCSI ID to a number other than "9".

Yes →

If the above countermeasures do not solve the problem, check the items in "8.4 Before You Contact the Scanner Service Provider" (page 169) first, then contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

8.4 Before You Contact the Scanner Service Provider

Please check the following items before contacting your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

General

Item	Findings
Scanner model name	Example: fi-6800 To find out the scanner model name, refer to "8.5 Checking the Product Labels" (page 171).
Serial No.	Example: 000001 To find out the Serial Number, refer to "8.5 Checking the Product Labels" (page 171).
Manufacture Date	Example: 2009-09 (September 2009) To find out the date of manufacture, refer to "8.5 Checking the Product Labels" (page 171).
Date of purchase	
Symptom	
Frequency of trouble	
Do you have warranty for this product?	
Name of option product used	Example: fi-680PRF For more details about the options, refer to "A.4 Scanner Options" (page 228).

Error Status

Computer connection issues

Item	Findings
OS version (Windows)	
Error message	
Interface type	Example: SCSI interface
Interface controller type	Example: Adaptec SCSI Card AHA-2940AU

Feeding issues

Item	Findings
Type of document	
Main purpose of use	
Last date of cleaning	
Date of consumable replacement	
operator panel status	

Image quality issues

Item	Findings
Scanner driver type and version	
Interface controller type	Example: Adaptec SCSI Card AHA-2940AU
OS version (Windows)	
Application software	Example: ScandAll PRO, Adobe Acrobat
Scanning side(s)	Example: front, back, duplex
Resolution	Example: 600 dpi, 75 dpi
Image mode	Example: Color, Grayscale, Binary (black & white)

Others

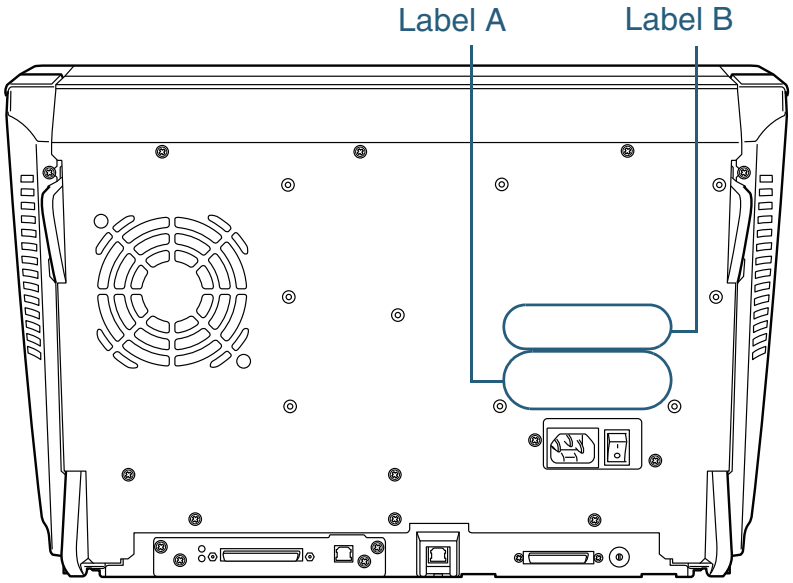
Item	Findings
Can you send both the output results and photographs that show the condition of the document by e-mail or FAX?	

8.5 Checking the Product Labels

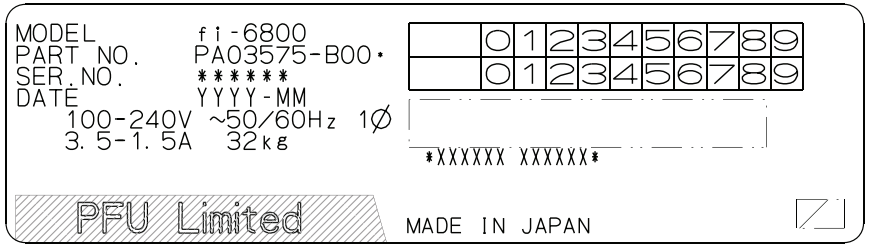
This section describes how to check the labels on the scanner.

Location

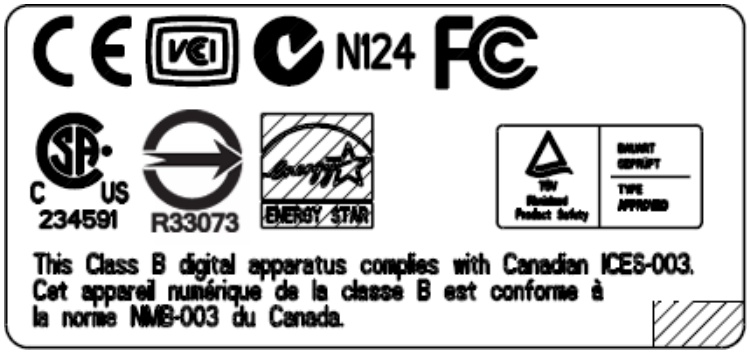
Locations of the two labels are as follows:



Label A (example): Shows the scanner information.



Label B (example): Shows the standards that the scanner conforms to.



Chapter 9 Operational Settings

This chapter explains how to configure the scanner settings by using the Software Operation Panel.

9.1 Starting Up the Software Operation Panel 173
9.2 Configurable Items 174
9.3 Settings Related to Page Counters 185
9.4 Settings Related to Scanning 189
9.5 Settings Related to Multifeed Detection 210
9.6 Settings Related to the Waiting Time 217
9.7 Settings Related to Power ON/OFF Control 219
9.8 Settings Related to Maintenance/Options 220

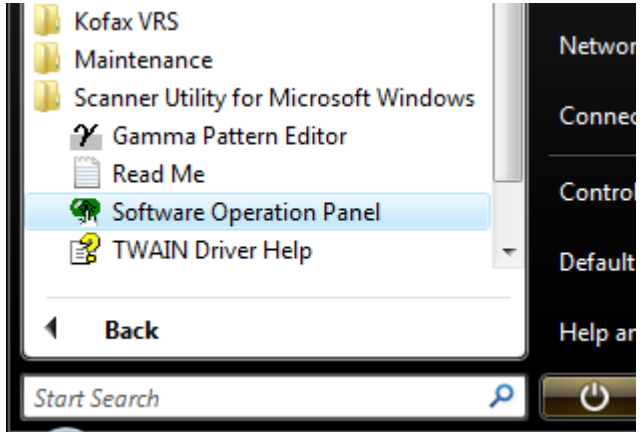
9.1 Starting Up the Software Operation Panel

The Software Operation Panel (SOP) is installed together with the scanner drivers (TWAIN/ISIS) or Kofax VRS.
With this application, you can configure various settings for operating the scanner and managing the consumables.

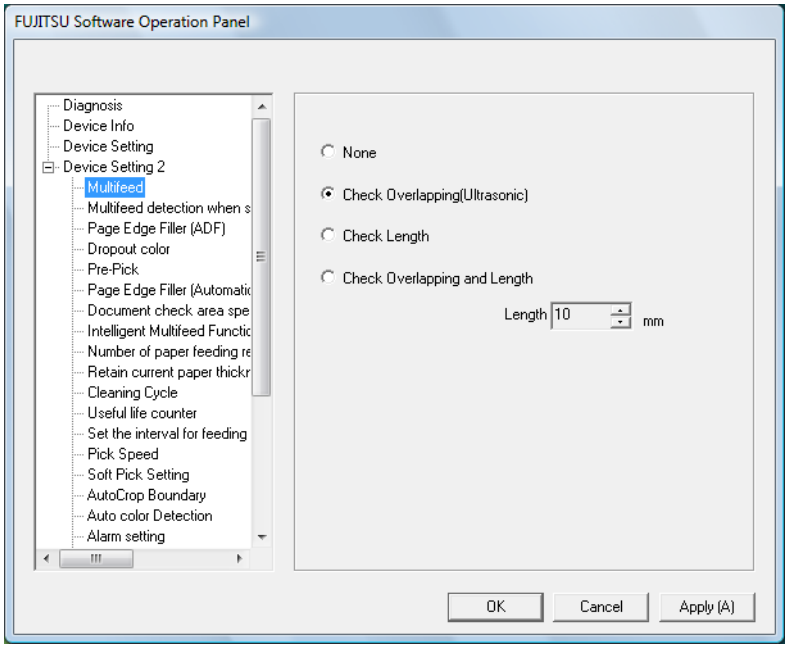
> Do not use the operator panel while the Software Operation Panel is running.

1 Confirm that the scanner is connected to your computer, then power on the scanner.
For information on how to turn the power on, refer to "1.3 Turning the Power ON/OFF" (page 17).

2 Select the [start] menu → [All Programs] → [Scanner Utility for Microsoft Windows] → [Software Operation Panel].



⇨ The [FUJITSU Software Operation Panel] dialog box appears.



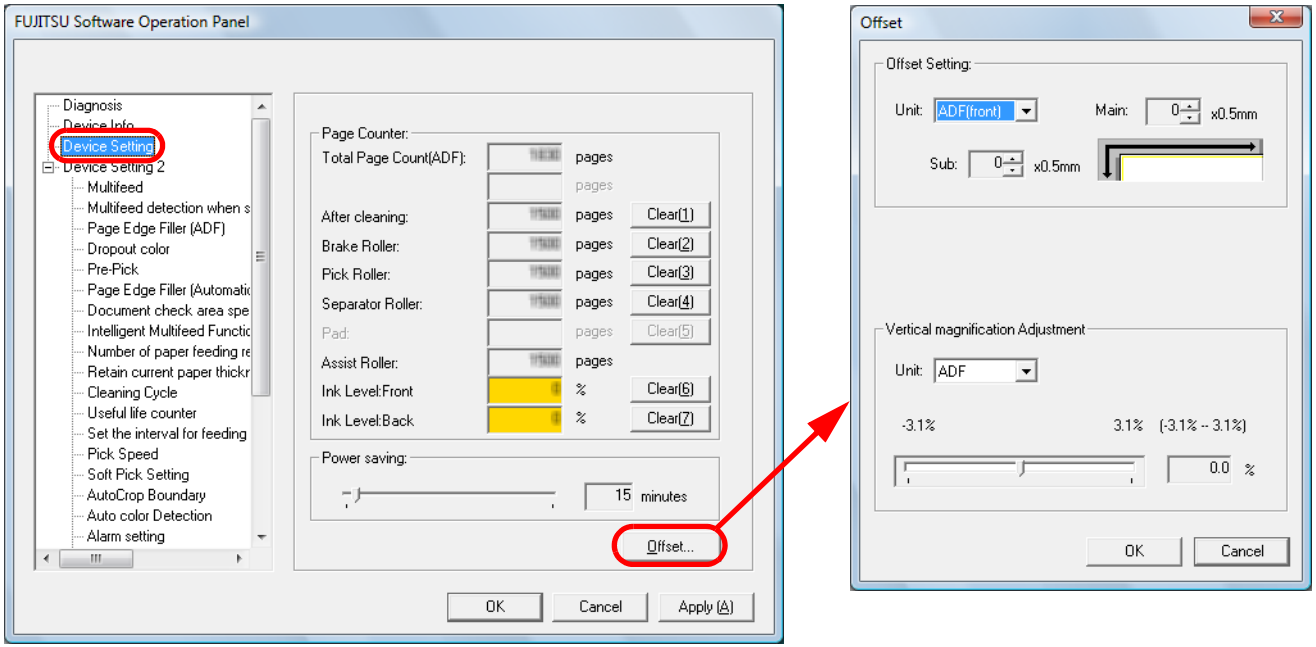
9.2 Configurable Items

Using the Software Operation Panel, you can configure the following settings for the scanner that is connected to a computer.

Device Setting

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting].



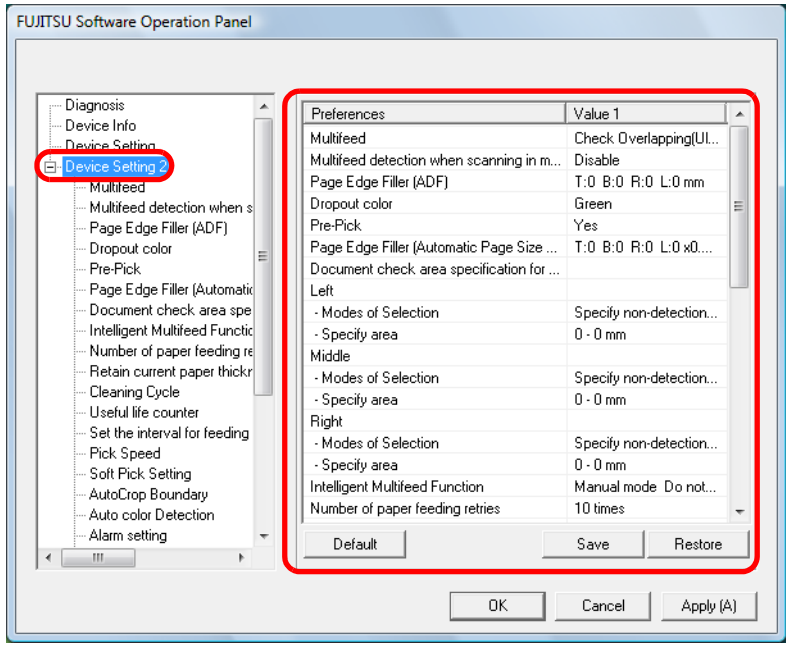
Items that can be configured in the above dialog box are as follows:

Item	Description	Setting/Value	Factory Default	SCSI or USB Connector 1	SCSI or USB Connector 2
				✓: Configurable	
Page Counter	Check the replacement cycle of the consumables and the total page count of the maintenance parts. Also use it to reset the counter when you have replaced the consumables or performed cleaning.	Total Page Count(ADF) / After cleaning / Brake Roller / Pick Roller / Separator Roller / Assist Roller	0	✓	✓
		Ink Level:Front / Ink Level:Back (only when imprinter is installed)	Only displayed when imprinter is installed		
Power saving	Specify the waiting time before entering power saving mode.	Range: 5 min. to 235 min. (in increments of 5 min.)	15 min.	✓	✓
Offset Setting	Adjust the position to start scanning for the specified scanning side(s).	SCSI or USB Connector 1: ADF(Front) / ADF(Back) SCSI or USB Connector 2: ADF(Back) Main/Sub: -2 to 3 mm (in increments of 0.5 mm)	Main/Sub: 0 mm	✓	✓
Vertical magnification Adjustment	Adjust the magnification level in feeding direction for the specified scanning method.	Applied to: ADF Setting range: -3.1 to 3.1% (in increments of 0.1%)	0%	✓	✓

Device Setting 2

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2].



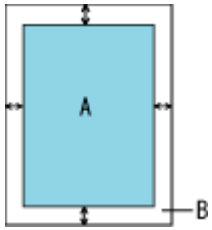
Click an item in the listing on the left to display the details of the settings (parameters) on the right.

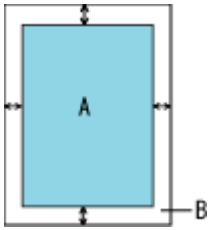
[Default] button resets the settings to factory default.

[Save] button saves the value configured in the Software Operation Panel to a file.

[Restore] button restores the saved values that were configured in the Software Operation Panel from a file.

Items that can be configured in the above dialog box are as follows:

Item	Description	Setting/Value	Factory Default	SCSI or USB Connector 1	SCSI or USB Connector 2
				✓: Configurable -: Not configurable	
Multifeed	Specify a method for multifeed detection. Detect by monitoring the overlapping, the document length, or the combination of both. It can also be configured from the scanner driver's setup dialog box. Note that priority is given to the scanner driver setting.	None / Check Overlapping (Ultrasonic) / Check Length / Check Overlapping and Length (when detecting from the length difference, select from 10/15/20 mm)	Check Overlapping (Ultrasonic)	✓	✓
Multifeed detection when scanning in manual feeding mode	Specify this item to enable multifeed detection during manual feeding.	SCSI or USB Connector 1: Disable / Follow driver settings SCSI or USB Connector 2: Disable / Follow Multifeed settings	Disable	✓	✓
Page Edge Filler (ADF)	Specify a width for the margin off the edge of the scanned image to fill in black or white. The margins are filled in white when the background is white, and filled in black when the background is black. It can also be configured from the scanner driver's setup dialog box. Note that the priority is given to the setting with a larger value.	Top/Left/Right: 0 to 15 mm Bottom: -7 to 7 mm (in increments of 1 mm)  (A: Image, B: Filled area, A+B: Output)	Top/Bottom/Left/Right: 0 mm	✓	-
Dropout color	Select a color to be dropped out from the scanned image (black & white/grayscale only). It can also be configured from the scanner driver's setup dialog box. Note that priority is given to the scanner driver setting.	Red / Green / Blue / None	Green	✓	-

Item	Description	Setting/Value	Factory Default	SCSI or USB Connector 1	SCSI or USB Connector 2
				✓: Configurable -: Not configurable	
Pre-Pick	Select [Yes] to prioritize the processing speed and [No] for otherwise. It can also be configured from the scanner driver's setup dialog box. Note that priority is given to the scanner driver setting.	Yes / No	Yes	✓	-
Page Edge Filler (Automatic Page Size Detection)	Specify the range of area to fill in when [Automatic Page Size Detection] is selected. Specify a width for the margin off the edge of the scanned image to fill in black or white. It can also be configured from the scanner driver's setup dialog box. Note that priority is given to the setting with a larger value.	Top/Bottom/Left /Right: 0 to 7.5 mm (in increments of 0.5 mm)  (A: Image, B: Filled area, A+B: Output)	Top/Bottom/Left/ Right: 0 mm	✓	-
Document check area specification for Multifeed Detection	Selected range: Select this item to restrict the area to run multifeed detection on.	[Selected range] check box	Not selected	✓	✓
	Enable/Disable (Left/Middle/Right): Specify whether to enable or disable multifeed detection for the specified area.	Enable / Disable (when [Selected range] is selected)	Disable		
	Start: Specify the start point of the check area in length (mm) from the top edge of the document.	0 to 510 mm (in increments of 2 mm)	0 mm		
	End: Specify the end point of the check area in length (mm) from the top edge of the document.	0 to 510 mm (in increments of 2 mm)	0 mm		

Item	Description	Setting/Value	Factory Default	SCSI or USB Connector 1	SCSI or USB Connector 2
				✓: Configurable -: Not configurable	
Intelligent Multifeed Function	When there is paper of the same size attached to a designated location on the page, configure the scanner to memorize the location of the attachment and not detect multifeeds for that location. Note that you first need to select [Check Overlapping (Ultrasonic)] for multifeed detection setting in "Specifying a multifeed detection method [Multifeed]" (page 210) or the scanner driver's setup dialog box. It can also be configured from the operator panel.	Manual mode / Auto mode 1 / Auto mode 2	Manual mode	✓	✓
	Select to clear the overlap pattern (length, location) memorized in Auto mode.	[Clear overlap pattern] check box	Not selected		
	Specify whether to enable or disable the [Scan] button when using Kofax VRS.	Enable Scan button (VRS)	Disable		
	Specify whether or not to memorize the multifeed pattern in the window that shows the multifeed image.	[Auto-Memorize MF Pattern (only when MF images are displayed)] check box	Not selected		
	Specify whether or not to memorize the multifeed pattern at power-off.	Remember / Do not remember	Do not remember		
Number of paper feeding retries	Configure this setting to change the number of feeding retries upon pick errors. It can also be configured from the operator panel.	1 to 12 times	3 times	✓	✓

Item	Description	Setting/Value	Factory Default	SCSI or USB Connector 1	SCSI or USB Connector 2
				✓: Configurable -: Not configurable	
Retain current paper thickness	Specify whether or not to keep the operator panel's paper separation force setting upon turning the power off.	Remember / Do not remember	Do not remember	✓	✓
Cleaning Cycle	Specify the cycle for cleaning the scanner. Also specify whether or not to show a message for cleaning from the scanner driver.	1,000 to 255,000 sheets (in increments of 1,000) [Show cleaning instructions.] check box	10,000 sheets Not selected	✓	✓
Life Counter Alarm Setting	Specify the replacement cycles for the consumables.	Each consumable 10,000 to 2,550,000 sheets (in increments of 10,000)	600,000 sheets	✓	✓
Set the interval for feeding sheets	If the bottom of the scanned image is partially missing due to a large skew when scanning in Automatic Page Size Detection, specify a longer interval to feed the documents. Specifying a longer interval leaves more time between each document to be scanned.	Short (default) - Long (1 to 4 levels)	Short (default)	✓	✓
Pick Speed	When multifeeds or paper jams occur frequently, the symptom may be improved by slowing down the speed (pick speed) in which the documents are fed. It can also be configured from the operator panel.	Normal / Slower	Normal	✓	✓

Item	Description	Setting/Value	Factory Default	SCSI or USB Connector 1	SCSI or USB Connector 2
				✓: Configurable -: Not configurable	
Soft Pick Setting	When you experience pick errors from the separator roller slipping on the paper, or paper jams from scanning thin papers of small widths, the symptom may be improved by bringing down the pick roller unit and keeping the unit at the lower position (disabling the Soft Pick Setting). It can also be configured from the operator panel.	Enable / Disable	Enable	✓	✓
AutoCrop Boundary	Specify whether or not to optimize (round up/down) the fractional part of the scanned image data.	Normal / Optimize	Normal	✓	-
Auto color Detection	Specify the slice level for automatic color/monochrome detection.	1 to 255 levels	5	✓	-
Alarm setting	Specify whether or not to sound an alarm when an error such as multifeed or paper jam occurs. It can also be configured from the operator panel.	Disable alarm / Low volume alarm / High volume alarm	Disable alarm	✓	✓
Jam Detection outside of scannable area when transporting paper	Specify whether or not to judge the symptom as paper jam when a document is skewed and passes outside the supported scanning area.	Enable / Disable	Enable	✓	✓

Item	Description	Setting/Value	Factory Default	SCSI or USB Connector 1	SCSI or USB Connector 2
				✓: Configurable -: Not configurable	
Imprinter selection	Specify which imprinter to use when you have installed both Front-Side Imprinter and Back-Side Imprinter. It can also be configured from the scanner driver's setup dialog box. Note that priority is given to the scanner driver setting.	Normal (obey Host specification) / Forcibly select Front-Side Imprinter / Forcibly select Back-Side Imprinter (only when the imprinter option is installed)	Normal (obey Host specification)	✓	✓
Timeout for manual feeding	Specify the waiting time to cancel manual feeding. It can also be configured from the operator panel.	SCSI or USB Connector 1: 5, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 180, 240, 300, 360, 420, 480, 540, 600, 900, 1200, 1500, 1800, 1999 (seconds) SCSI or USB Connector 2: 5, 10, 20, 30 (seconds)	10 seconds	✓	✓
Paper Protection	Specify whether to enable or disable Paper Protection. Enabling this setting reduces the risk of having the documents damaged upon feeding errors, by stopping the scan when the scanner detects a document that is unusually warped. Paper Protection is disabled in Manual Feed mode. It can also be configured from the scanner driver's setup dialog box or the operator panel. Note that priority is given to the scanner driver setting unless you have prioritized the operator panel setting.	Enable / Disable	Disable	✓	✓

Item	Description	Setting/Value	Factory Default	SCSI or USB Connector 1	SCSI or USB Connector 2
				✓: Configurable -: Not configurable	
Paper Protection Sensitivity	You can specify the level of sensitivity to detect an abnormal feeding of documents when Paper Protection is enabled. It can also be configured from the operator panel. Note that you can prioritize the operator panel setting.	Low / Normal / High	Normal	✓	✓
Scan Setting for Document with Tab (Automatic Page Size Detection)	For documents with index tabs or index stickers attached on the bottom of the page, you can keep the tab (index or index stickers) on the scanned image when scanning in Automatic Page Size Detection. Specifying [Document with tab] shows the image of the tab, but slows down the scanning speed.	SCSI or USB Connector 1: Document with tab / Document without tab / Non-rectangular document SCSI or USB Connector 2: Document with tab / Document without tab	Document without tab	✓	✓
Scan Setting for Document in Dark Background Color	Configure this setting when the edges of a document with dark background color are falsely detected. You can specify the level of sensitivity to accurately detect the edges of documents with dark backgrounds.	Enable / Disable Density of background color: Level 1 to 5	Disable	-	✓
Overcrop/ Undercrop	Adjust the size of the scanned document output image detected in Automatic Page Size Detection.	Overcrop: 0 to 5 mm (in increments of 1 mm) Undercrop: -5 to 0 mm (in increments of 1 mm)	0 mm	-	✓

Item	Description	Setting/Value	Factory Default	SCSI or USB Connector 1	SCSI or USB Connector 2
				✓: Configurable -: Not configurable	
Maintenance and Inspection Cycle	Specify the cycle for scanner maintenance and inspection to be performed by a service engineer. When the specified time period elapses since the last periodical maintenance and inspection, a message for periodical maintenance appears.	Disable / Enable Maintenance/Inspection cycle: 1 to 12 months	Disable	✓	✓
Multi dropout colors	Specify a color to be dropped out from the scanned image (black & white/grayscale mode only). You can select any color(s) to drop out in [Multi dropout colors]. Note that priority is given to the scanner driver setting if any dropout color has been specified in the scanner driver's setup dialog box.	Use driver settings / Custom	Use driver settings	-	✓
Overscan Control	Outputs the image in the optimum position when the image is partially missing due to a large skew.	Normal / Optimize Black frame thickness: Thin (Default) to Thick (level 1 to 3)	Normal	✓	-

9.3 Settings Related to Page Counters

Checking and Resetting the Counters

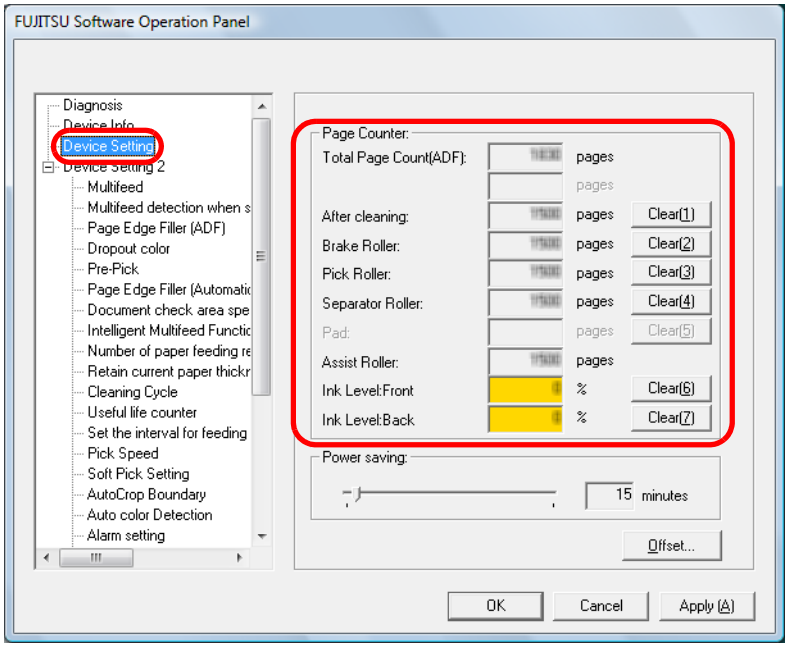
■ Checking the counters

You can check the replacement cycle of the consumables and the total page count of the maintenance parts.
The background color of the counter changes when either consumable replacement, maintenance part replacement, or cleaning is required. The counter changes the background color in the following cases:

- Background color changes to light yellow when the page count after replacing the consumable reaches 95% of the value configured in "Specifying the Cycle to Replace Consumables [Life Counter Alarm Setting]" (page 188) in the Software Operation Panel, and changes to yellow when it reaches 100%. (For brake roller/pick roller/separator roller counters)
- Background color changes to yellow when the scanner determines that the condition of the roller has exceeded the threshold that can be corrected by monitoring the wear on the roller. (For assist roller counter)
- Background color changes to yellow when the page count after cleaning reaches 100% of the value configured in "Specifying the Cycle to Clean the Scanner [Cleaning Cycle]" (page 187) in the Software Operation Panel. (Cleaning counter)
- Background color changes to yellow when the amount of remaining ink reaches below 33%. This is displayed only when the imprinter is installed. (For [Ink Level: Front] / [Ink Level: Back])

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting].



In this dialog box, you can check the following items:

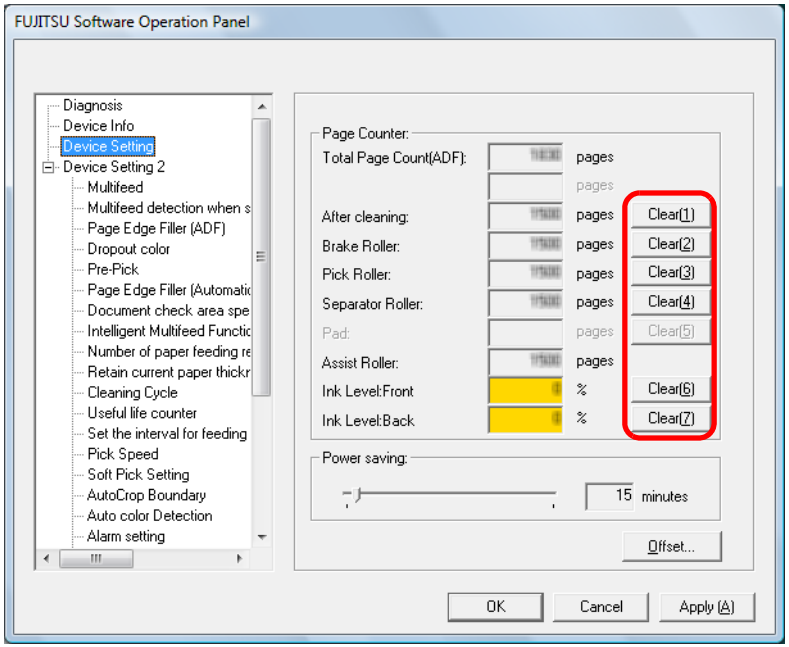
Item	Description
Total Page Count (ADF)	Approximate number of sheets scanned through the ADF (in units of 10)
After cleaning	Approximate number of sheets scanned after the last cleaning (in units of 50)

Item	Description
Brake Roller	Approximate number of sheets scanned since the last replacement of brake roller (in units of 500)
Pick Roller	Approximate number of sheets scanned since the last replacement of pick rollers (in units of 500)
Separator Roller	Approximate number of sheets scanned since the last replacement of separator roller (in units of 500)
Assist Roller	Approximate cumulative number of sheets fed (in units of 500)
Ink Level: Front	Remaining ink in the print cartridge of the Front-Side Imprinter (sold separately). (Displayed only when the imprinter option is installed.)
Ink Level: Back	Remaining ink in the print cartridge of the Back-Side Imprinter (sold separately). (Displayed only when the imprinter option is installed.)

Resetting the counters

When you have replaced the consumables or performed cleaning, reset the corresponding counters as follows:

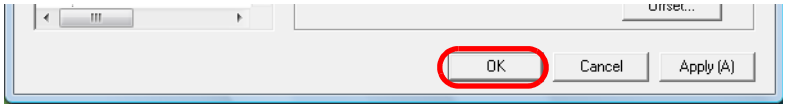
1 Click the [Clear] button for the consumable(s) that you replaced.



⇨ The counter value is reset to 0.
For ink level, it is reset to 100.

> The assist roller counter cannot be cleared. It requires a service engineer to clear the counter. For more details, contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

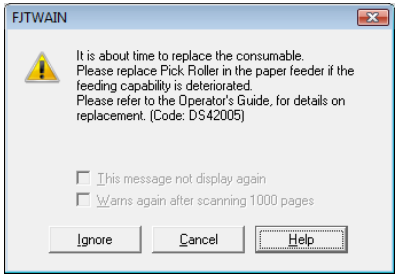
2 In the Software Operation Panel, click the [OK] button.



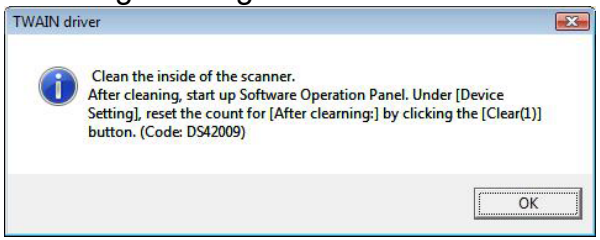
Message for consumable replacement/cleaning

The following may sometimes appear while using the scanner:

Consumable replacement message:



Cleaning message:



According to the instruction displayed, clean the scanner or replace the consumables.

When you click the [Ignore] button, the cleaning instruction disappears and the scanning continues. You may be able to continue scanning for a while, however, it is recommended that you replace the consumable(s) as soon as possible.
To stop the scan and replace the consumable(s) right away, click the [Cancel] button.

For information on how to replace the consumables, refer to the following sections:

- Pick Roller "7.2 Replacing the Pick Roller" (page 135)
- Separator Roller "7.3 Replacing the Separator Roller" (page 137)
- Brake Roller "7.4 Replacing the Brake Roller" (page 140)

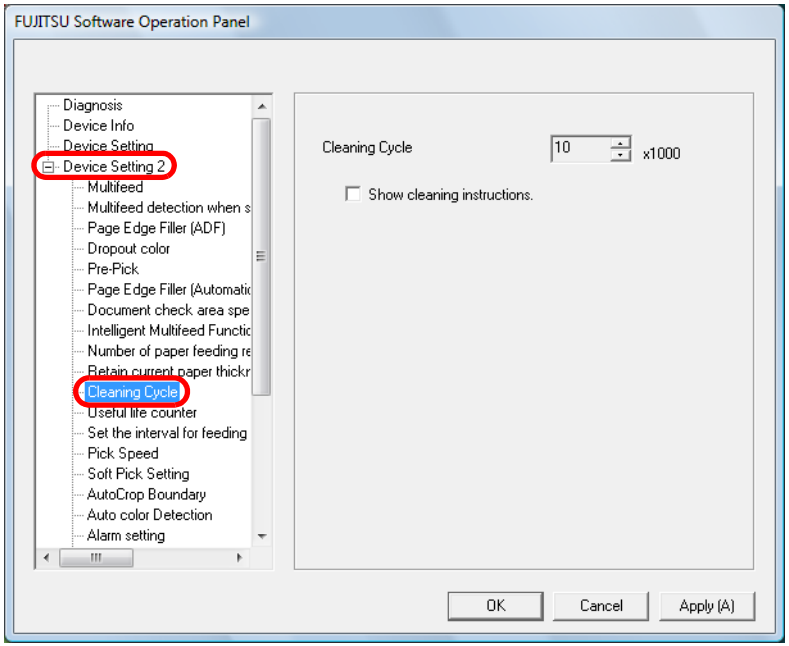
For information on how to clean the scanner, refer to "Chapter 6 Daily Care" (page 121).

Specifying the Cycle to Clean the Scanner [Cleaning Cycle]

You can specify the cleaning cycle for the scanner.
The background color of the counter changes to yellow when the page count after cleaning reaches 100% of the value specified here.
You can also display the message for cleaning (page 187).

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Cleaning Cycle].



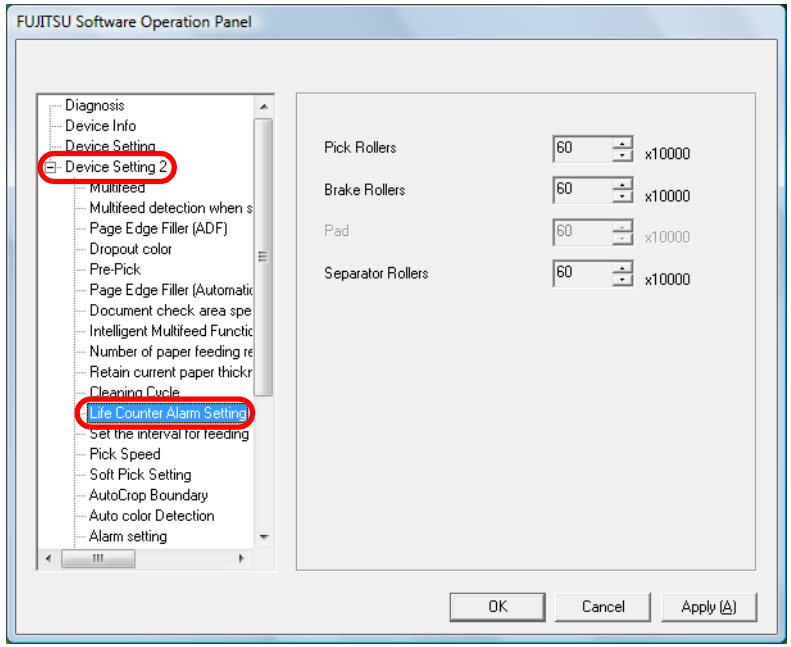
3 Specify a value to determine when to clean the scanner.
The specifiable value is from 1,000 to 255,000 in increments of 1,000.
Also specify whether or not to display the cleaning message.

Specifying the Cycle to Replace Consumables [Life Counter Alarm Setting]

You can specify the replacement cycle of the consumables. The background color of the counter changes to light yellow when the page count after replacing the consumable reaches 95% of the value specified here, and turns yellow when it reaches 100%. You can also display the message for replacing consumables (page 187).

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Life Counter Alarm Setting].



3 Specify a value for the life cycle for replacing each consumable (Pick roller, separator roller and brake roller).
The specifiable value is from 10,000 to 2,550,000 in increments of 10,000.

9.4 Settings Related to Scanning

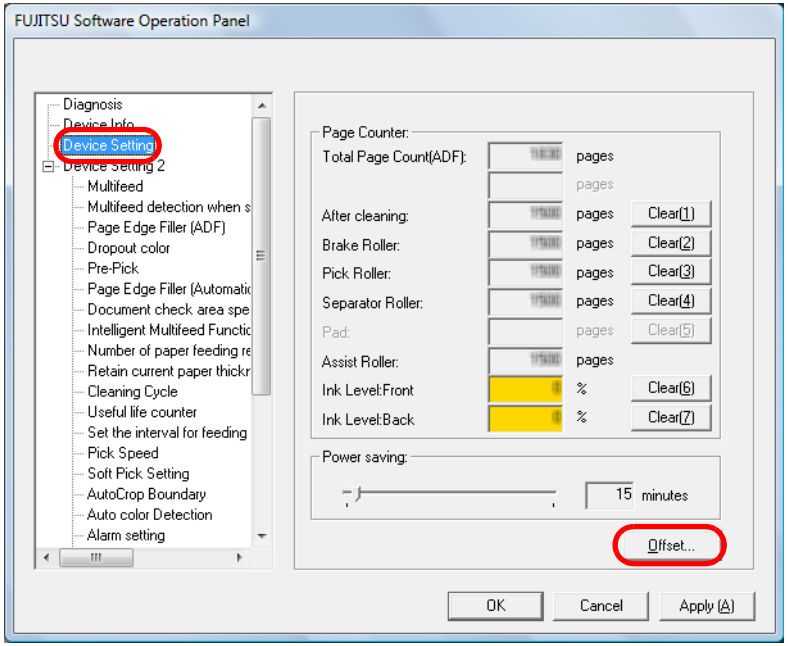
Adjusting the Starting Position for Scanning [Offset/Vertical Magnification Adjustment]

When the output position of the scanned image is not correct or the image appears shortened/elongated (vertically), use the following procedure to adjust the offset and the vertical magnification for correction.

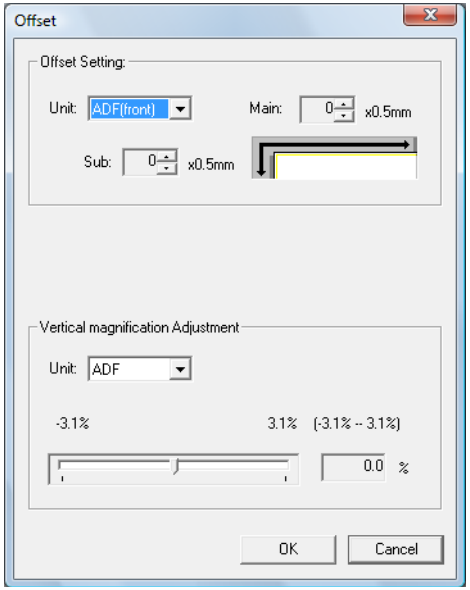
> Normally, you should not have to make any adjustments as the factory default settings are configured at appropriate values.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting] and click the [Offset] button.



3 Adjust the offset/vertical magnification as necessary.



Offset Setting	Description
Unit	Select [ADF (front)] or [ADF (back)] as the target for offset adjustment. Note that when the connection is via SCSI or USB Connector 2, you can only adjust the offset for [ADF (back)].
Main	Adjusts the horizontal (width) offset. The setting range is from -2 to 3 mm in 0.5 mm increments.
Sub	Adjusts the vertical (length) offset. The setting range is from -2 to 3 mm in 0.5 mm increments.

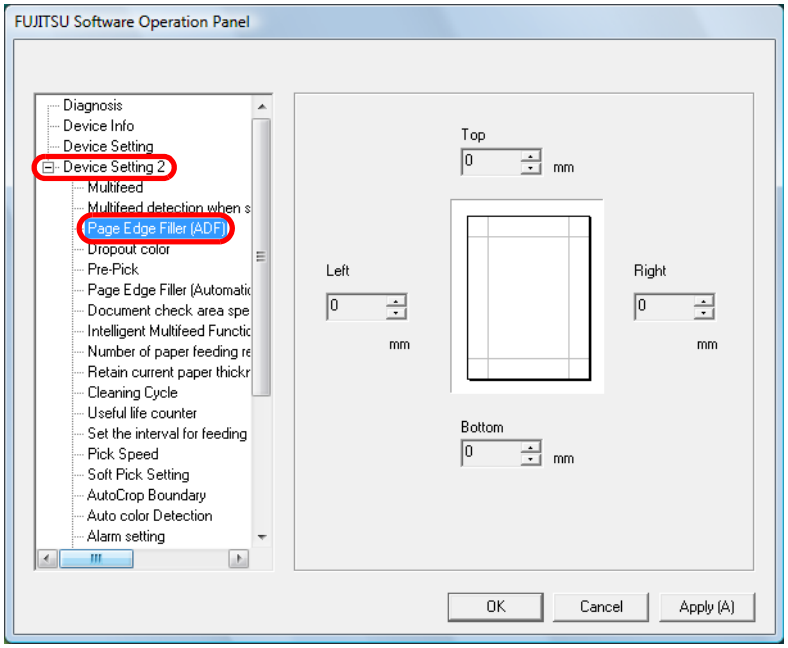
Vertical magnification Adjustment	Description
Unit	The target for vertical magnification adjustment is fixed at [ADF].
Vertical magnification Adjustment (length)	Adjusts the vertical (length) magnification. The setting range is from -3.1 to 3.1% in 0.1% increments.

Eliminating Shadows or Streaks on the Scanned Image Edge [Page Edge Filler (ADF)]

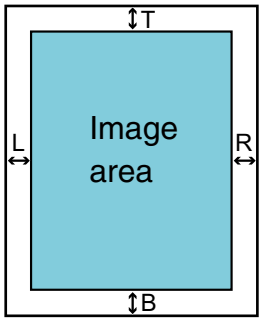
Depending on the condition of the document that you scan, some shadow of the document may be reflected onto the edge of the output image and appear as black streaks.
In this case, you can improve the image quality around the edges by using the Page Edge Filler function to fill around the edges.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Page Edge Filler (ADF)].



3 Specify the width of each margin to fill: top, bottom, right, and left.



T :Top = 0 to 15 mm
B :Bottom= -7 to 7 mm
R :Right = 0 to 15 mm
L :Left = 0 to 15 mm

(in 1 mm increments)

The specified area is filled in the same color as the background.

Note that if the target range of the Page Edge Filler is too wide, some characters near the edge may be cut out.

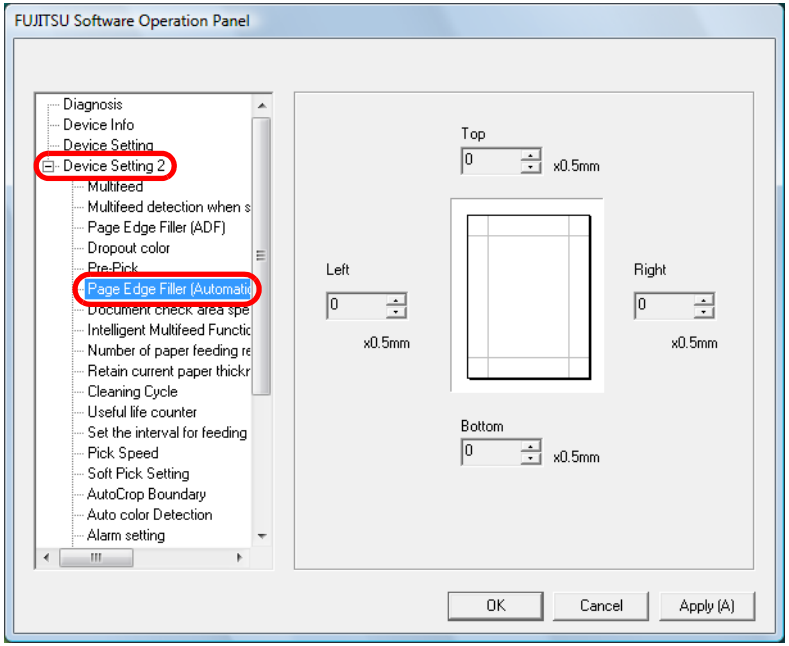
- The background is normally white but it can be changed to "Black background" in the scanner driver. If you are using the TWAIN scanner driver, select the [Option] button, and then specify [Black background] for [Automatic Size and Skew detection] in the [Rotation] tab.
- This setting can also be configured from the scanner driver's setup dialog box. Note that priority is given to the setting with the larger value.
- This setting does NOT appear when Kofax VRS is used.

Eliminating Shadows or Streaks on the Scanned Image Edge [Page Edge Filler (Automatic Page Size Detection)]

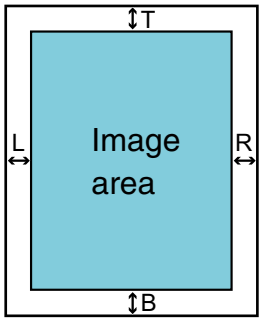
When scanning in Automatic Page Size Detection, depending on the condition of the document that you scan, some shadow of the document may be reflected onto the edge of the output image and appear as black streaks.
In this case, you can improve the image quality around the edges by using the Page Edge Filler function to fill around the edges.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Page Edge Filler (Automatic Page Size Detection)].



3 Specify the width of each margin to fill; top, bottom, right, and left.



T :Top = 0 to 7.5 mm
B :Bottom = 0 to 7.5 mm
R :Right = 0 to 7.5 mm
L :Left = 0 to 7.5 mm

(in 0.5 mm increments)

The specified area is filled in the same color as the background.

- Note that if the target range of the Page Edge Filler is too wide, some characters near the edge may be cut out.
- For information on how to configure Automatic Page Size Detection, refer to "Automatically Correcting Skewed Document Images" (page 100).
- Unless Automatic Page Size Detection is specified, the setting of [Page Edge Filler (ADF)] is applied. For more details, refer to "Eliminating Shadows or Streaks on the Scanned Image Edge [Page Edge Filler (ADF)]" (page 191).

- This setting can also be configured from the scanner driver's setup dialog box. Note that priority is given to the setting with the larger value.
- This setting does NOT appear when Kofax VRS is used.

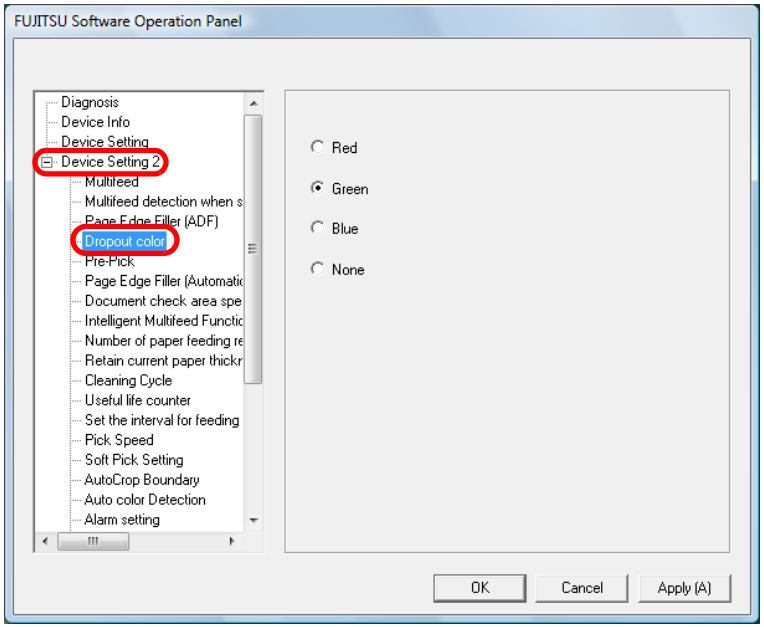
Specifying a Color to Drop Out [Dropout color]

By using the "Dropout Color" function, you can scan documents with the specified color removed from the light's three primary colors which are red, green, and blue.
For instance, when you scan a document containing black text with a green background, you can output an image of black text only.

- Dropout colors can only be specified in black & white or grayscale mode.
- Dropout works best with light (low intensity) colors, and dark colors may not drop out.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Dropout color].



3 Select a color to drop out.
Red, Green, Blue: Red, green, or blue is dropped out.

None: No color is dropped out.

When connected via SCSI or USB connector 1, the Software Operation Panel allows you to select colors from red, green, and blue only. To drop out other colors, configure the settings in the scanner driver. For information on how to configure settings by the scanner driver, refer to "Excluding Colors from Images (Dropout Color)" (page 88).

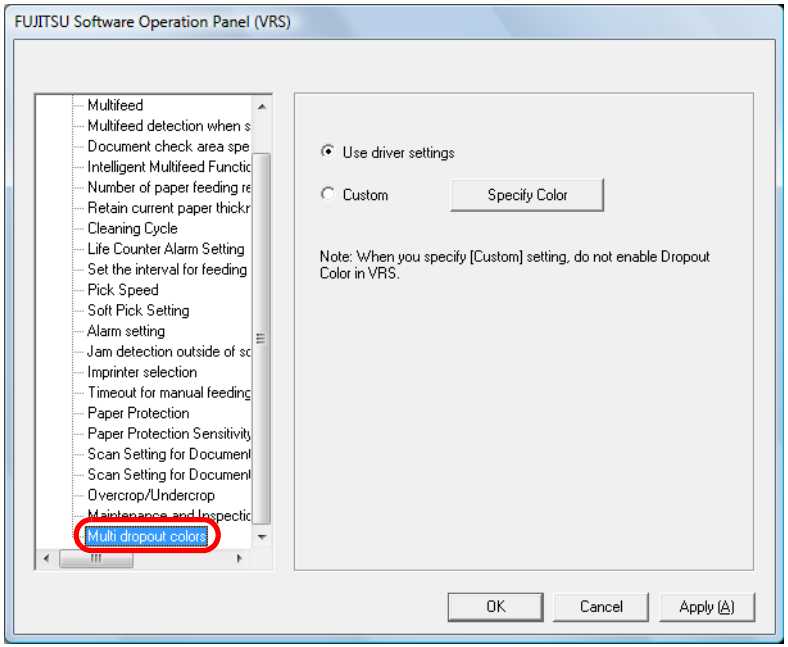
- This setting can also be configured from the scanner driver's setup dialog box. Note that priority is given to the scanner driver setting.
- This setting does NOT appear when Kofax VRS is used.

Specifying Custom Color(s) to Drop Out [Multi dropout colors]

By using the [Multi dropout colors] function, you can scan documents with any specified colors removed. (This function is only available in black & white or grayscale mode.)
For instance, when you scan a document containing black text with a green background, you can output an image with only the black text.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

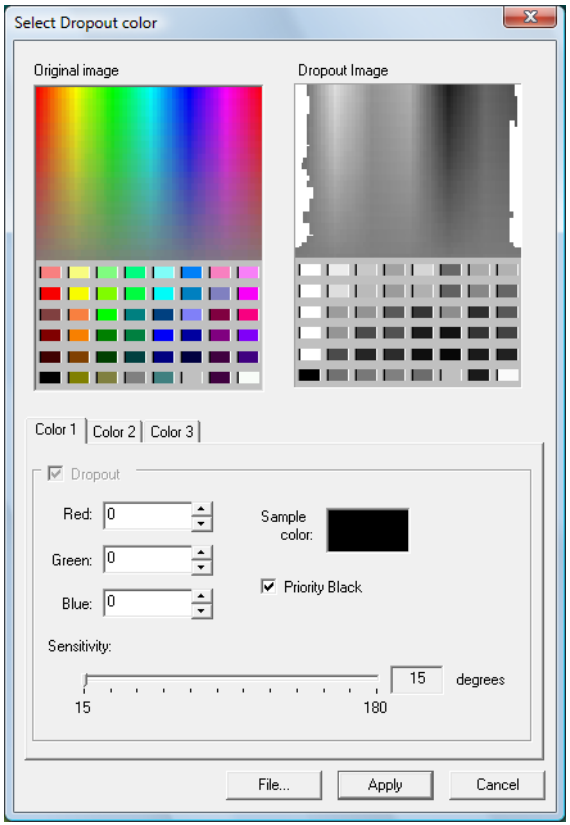
2 From the listing on the left, select [Device Setting 2] → [Multi dropout colors].



3 Select how to specify the dropout color(s).
Use driver settings: Follows the scanner driver setting.

Custom: Specified colors are dropped out.

When you select [Custom] and click the [Specify Color] button, the [Select Dropout Color] dialog box is displayed where you can select up to three colors to be dropped out.



- [Original image]
  A sample color palette is displayed. Click to select the color.
- [Dropout image]
  The image after dropping out the color(s) is displayed.

- [Color 1], [Color 2], and [Color 3] tabs
  Specify the color(s) to be dropped out. Up to three colors can be selected at once.
  - [Dropout] check box
    Select this check box in the [Color 2] or [Color 3] tab when you specify more than one color to be dropped out.
  - [Red] / [Green] / [Blue]
    Displays the information of the specified dropout color in numerical values. These values can be typed in directly or changed by clicking the [▲] / [▼] button.
  - Sample color
    Displays the specified color.
- [Priority Black] check box
  Select this check box when you do not want to drop out the text. This option saves low-intensity colors such as black (generally used for characters) from being dropped out.
- [Sensitivity]
  Specify the allowable range for the selected dropout color.
  Range: 15 to 180 degrees
  The larger the value, the wider the dropped out color range becomes.
- [File] button
  Allows you to view an image file (*.bmp) in the [Original Image] frame and select a dropout color.
- [Apply] button
  Applies the configured settings and closes the dialog box.
- [Cancel] button
  Cancels the configured settings and closes the dialog box.

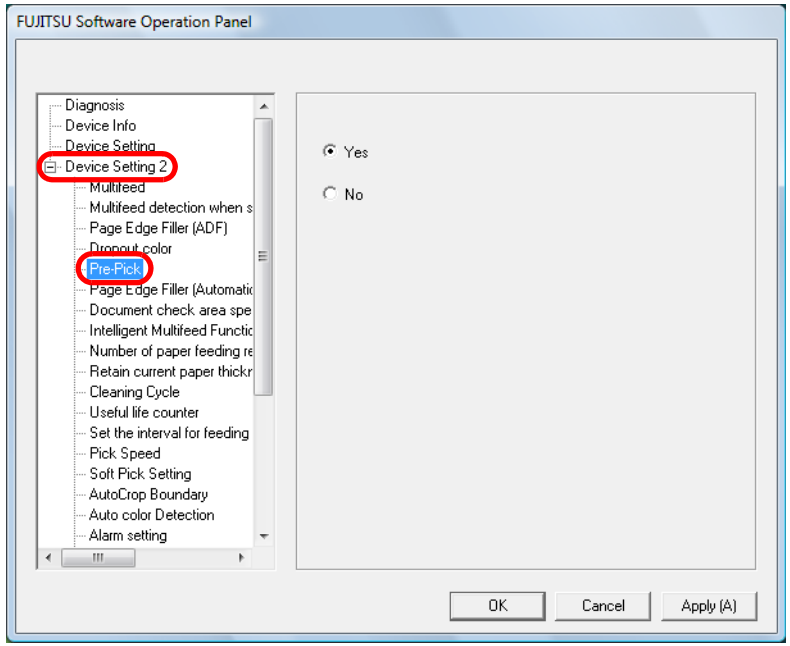
- When selecting [Custom], specify [None] for dropout color in the scanner driver.
- Note that priority is given to the scanner driver setting when a dropout color is specified in the scanner driver's setup dialog box.
- This setting appears ONLY when Kofax VRS is used.

Shortening the Scanning Intervals [Pre-Pick]

"Pre-Pick" refers to feeding the document to the starting position for scanning before the next scan.
Enabling [Pre-Pick] shortens the interval between scanning each document.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Pre-Pick].



3 Configure settings for pre-picking.
Select [Yes] to enable and [No] to disable Pre-pick.

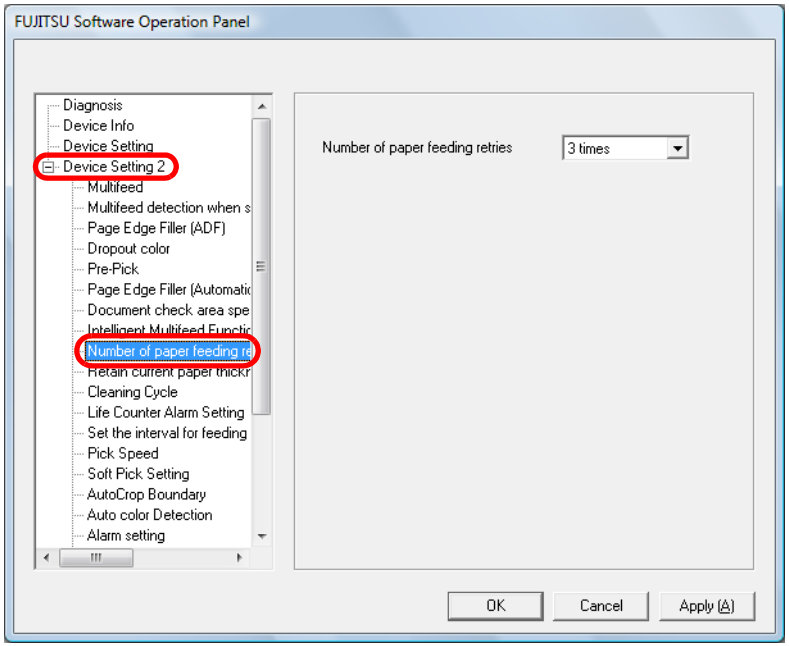
- If you cancel in the middle of scanning while Pre-Pick is enabled, you will have to remove the pre-picked document, then load the document again.
- This setting can also be configured from the scanner driver's setup dialog box. Note that priority is given to the scanner driver setting.
- This setting does NOT appear when Kofax VRS is used.

Specifying the Number of Feeding Retries [Number of paper feeding retries]

Configure this setting to change the number of feeding retries upon pick errors.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Number of paper feeding retries].



3 Specify the number of paper feeding retries.
You can select from1 to 12 times.

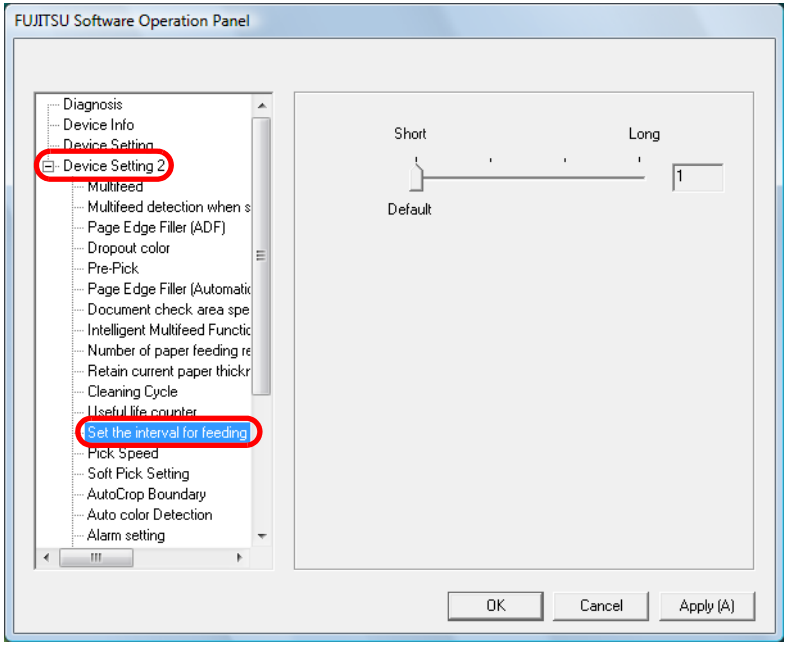
> This setting can also be configured from the operator panel.

Specifying the Interval to Feed the Documents [Set the interval for feeding sheets]

If the scanned image is partially missing at the bottom due to a large skew when scanning in Automatic Page Size Detection, specify a longer interval to feed the documents to leave more time between each document to be scanned.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Set the interval for feeding sheets].



3 Specify the paper feeding interval.
You can select from [Short (Default)] to [Long] (in four levels).

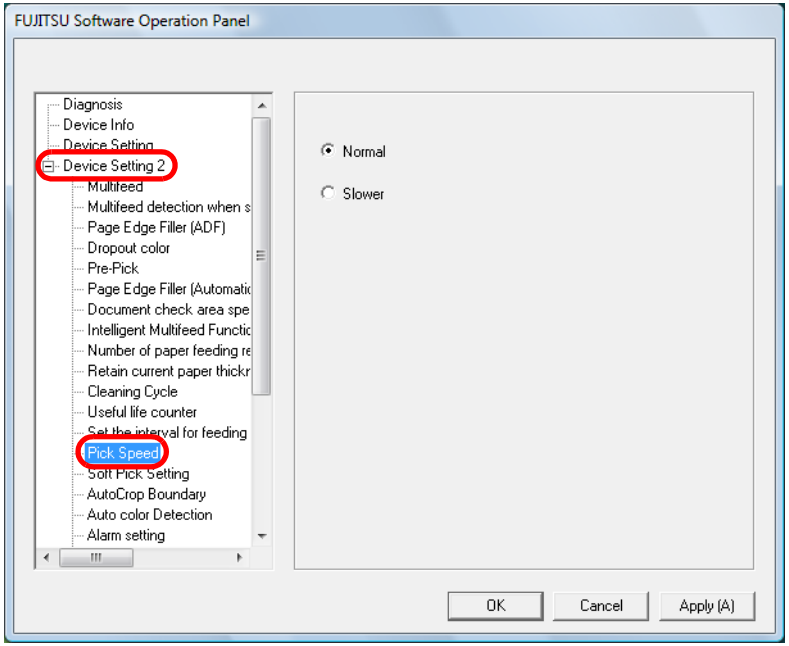
> Note that it takes more time for scanning as the paper feeding interval becomes longer.

Setting the Speed to Feed the Documents [Pick Speed]

When a multifeed or paper jam occurs frequently, the symptom may be improved by slowing down the speed in which the documents are fed (pick speed).
This setting is effective for scanning thin papers.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Pick Speed].



3 Select the paper feeding speed (pick speed).
Normal: Normal paper feeding speed

Slower: Slower than normal paper feeding speed

Note that it takes more time for scanning as the paper feeding speed slows down.

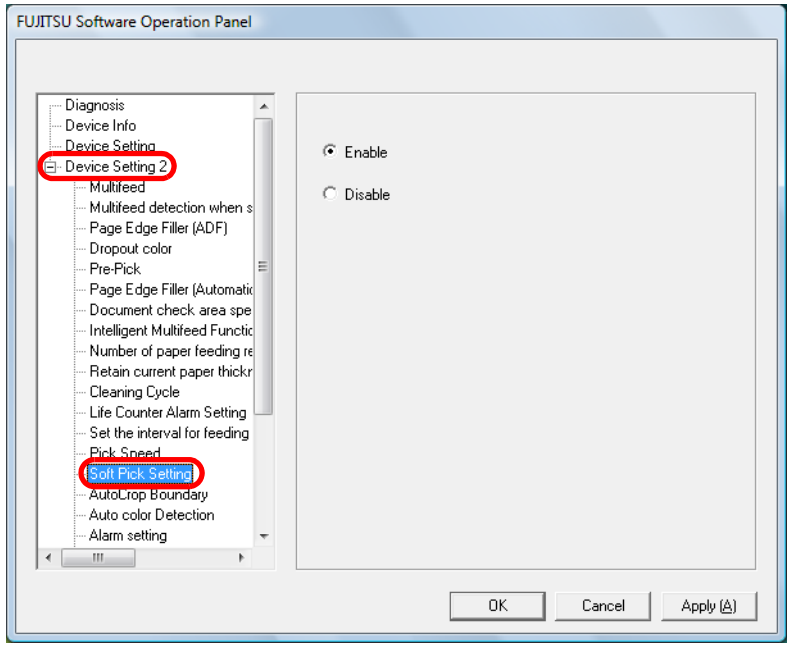
This setting can also be configured from the operator panel.

Paper Feeding Operation Setting [Soft Pick Setting]

When you experience pick errors from the separator roller slipping on the paper, or paper jams from scanning thin papers of small widths, the symptom may be improved by bringing down the pick roller unit and keeping the unit at the lower position (disabling the Soft Pick Setting).

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Soft Pick Setting].



3 Specify whether to enable or disable the soft pick setting.
Select [Disable] to reduce pick errors and paper jams, by lowering the pick roller.

> Skews and multifeeds may occur when you perform scanning with the soft pick setting disabled.
> Use [Enable] for normal scanning.

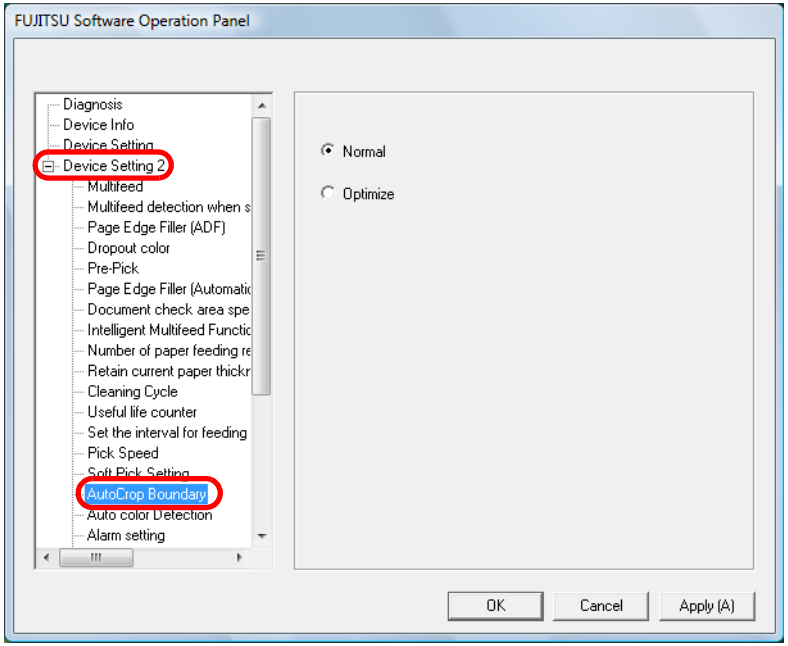
> This setting can also be configured from the operator panel.

Cropping the Image Boundary [AutoCrop Boundary]

Some fractional data may be generated in scanned images in the process of scanning when Automatic Page Size Detection is on. You can specify whether to include or exclude such fractional data by using the AutoCrop Boundary function.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [AutoCrop Boundary].



3 Select whether to include or exclude the fractional data.
Select [Optimize] to prevent any exclusion of fractional data from scanned images, and select [Normal] to delete unnecessary data.

- When you scan a document with text near the right edge while [Normal] is selected, some pixel data there may be lost.
- While selecting [Optimize] can prevent data loss, it may also generate black lines near the right edge.
- For information on how to specify Automatic Page Size Detection, refer to "Automatically Correcting Skewed Document Images" (page 100).

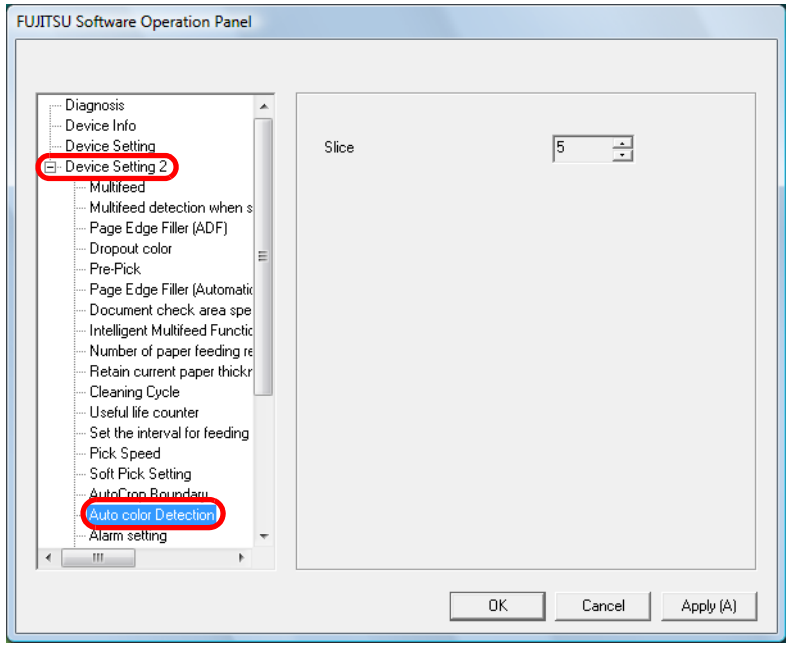
- This setting does NOT appear when Kofax VRS is used.
- This setting is only applied in black & white mode.

Setting Automatic Detection for Color/ Monochrome [Auto color Detection]

Specify the slice level for Auto Color Detection.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Auto color Detection].



3 Select the slice value.
You can select the Slice value from 1 to 255.
Increase the value when black & white documents are recognized as color documents. Decrease the value when color documents are recognized as black & white documents.

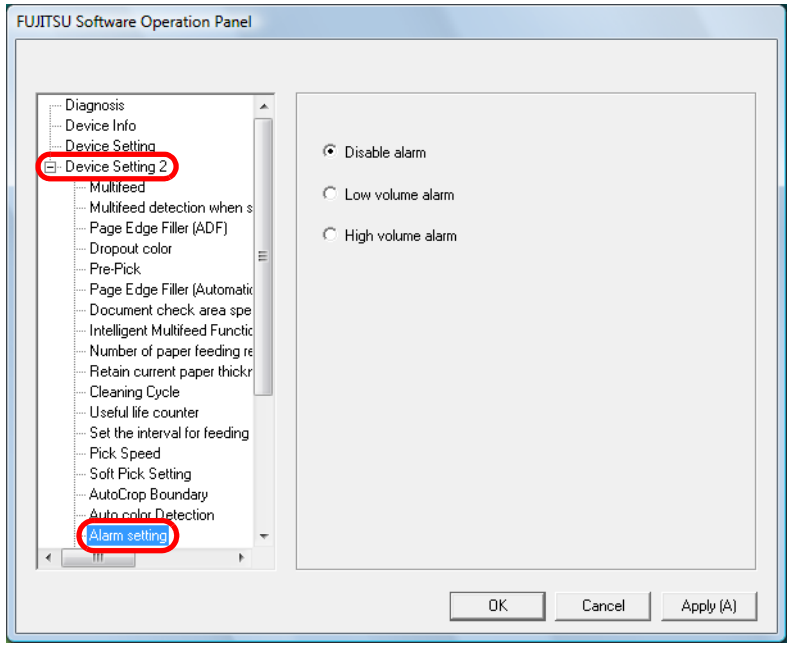
- For information on how to configure the automatic color/monochrome detection, refer to "Automatically Detecting the Document Color (Color/Monochrome)" (page 110).
- This setting does NOT appear when Kofax VRS is used.

Sounding an Alarm When an Error Occurs [Alarm setting]

Specify whether or not to beep an alarm sound when a paper jam or multifeed occurs.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Alarm setting].



3 Configure settings for alarm.

Disable alarm:	No alarm beeps even when an error occurs.
Low volume alarm:	Beeps the alarm in small volume when an error occurs.
High volume alarm:	Beeps the alarm in large volume when an error occurs.

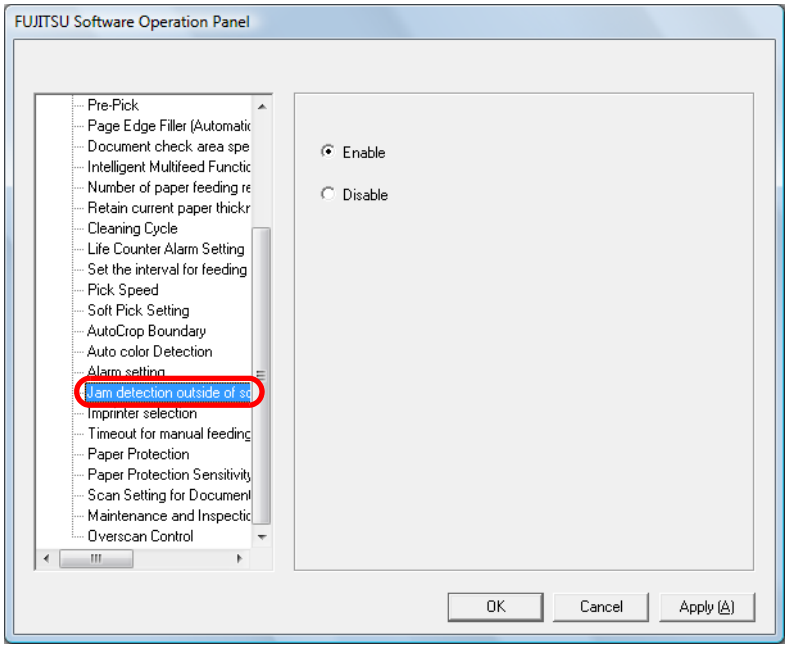
This setting can also be configured from the operator panel.

Detecting Paper Jam outside of Scannable Area [Jam Detection outside of scannable area when transporting paper]

Specify whether or not judge the symptom as paper jam when a document is skewed and passes outside the supported scanning area.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Jam detection outside of scannable area when transporting paper].



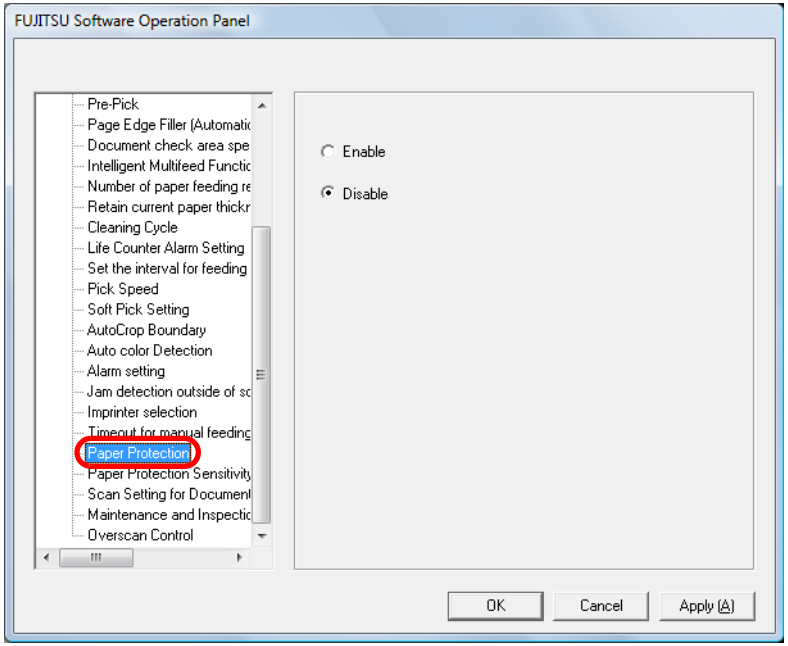
3 Select whether to enable or disable [Jam detection outside of scannable area when transporting paper].
Select [Enable] to judge such case as paper jam.

Setting for a Function to Save the Documents from Being Damaged [Paper Protection]

Specify whether to enable or disable Paper Protection.
Feeding errors during scanning could damage or tear valuable documents. Enabling this setting reduces the risk of having your documents damaged in such ways, by stopping the scan when the scanner detects a document that is unusually warped.
This function can be used to scan documents such as thin papers which are difficult to feed.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Paper Protection].



3 Specify whether to enable or disable Paper Protection.
When you select [Enable], the scanner stops the scan when it detects a document that is unusually warped.

- Note that Paper Protection is a function that suppresses the documents from being damaged, and does not guarantee all documents to be saved.
- When you enable Paper Protection, make sure to set the documents with their top edges aligned (especially for a mixed batch with different lengths).
  If the top edges are not aligned properly, the Paper Protection function may be activated and stop the scan even when the documents are being fed correctly.

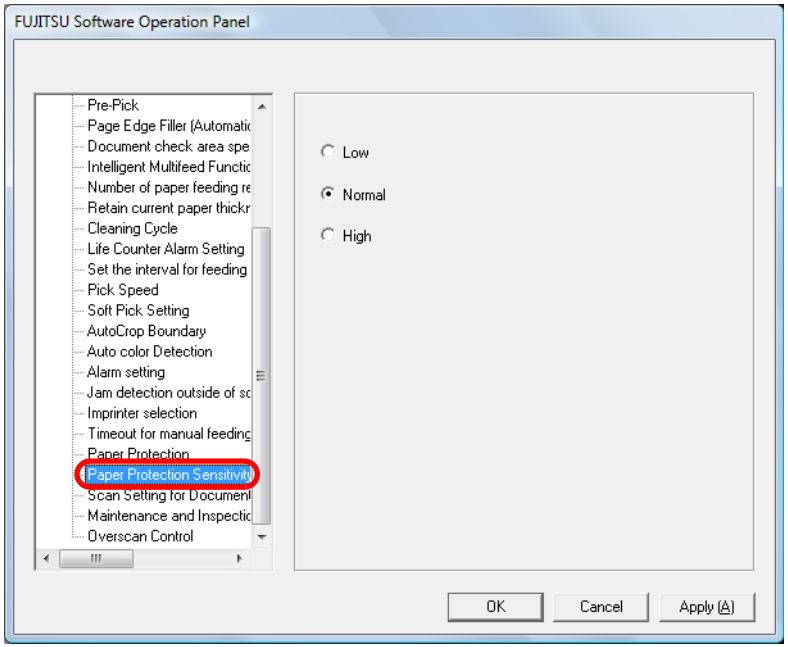
- Paper Protection is disabled in Manual Feed mode.
- This setting can also be configured from the scanner driver's setup dialog box or the operator panel. Note that priority is given to the scanner driver setting unless you have prioritized the operator panel setting.

Specifying the Sensitivity Level for Paper Protection [Paper Protection Sensitivity]

You can specify the level of sensitivity to detect an abnormal feeding of documents when Paper Protection is enabled. Documents are deformed (e.g. warped, bent, creased) when they are not being fed by the rollers properly. To detect such a symptom and stop the scan, select [1: Low] to only detect documents that are highly deformed, and [3: High] to also detect documents that are slightly deformed.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Paper Protection Sensitivity].



3 Specify the sensitivity level for Paper Protection.

Low:	Decreases the sensitivity level to detect warped documents.
Normal:	Monitors the documents in normal sensitivity. Keep this setting for normal use.
High:	Increases the sensitivity level to detect warped documents.

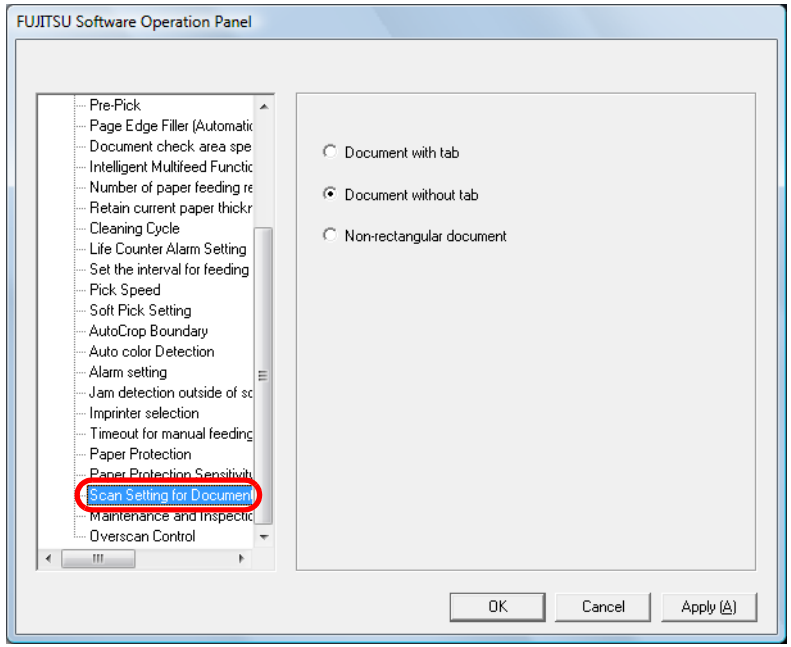
- If a paper jam occurs at feeding position frequently, select [Low].
- This setting can also be configured from the operator panel. Note that you can prioritize the operator panel setting.

Scan Settings for Documents with Tabs/Non-rectangular Documents [Scan Setting for Document with Tab (Automatic Page Size Detection)]

For documents with index stickers or index tabs attached on the end, you can scan the whole document including its attachments with Automatic Page Size Detection.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Scan Setting for Document with Tab (Automatic Page Size Detection)].



3 Select one from [Document with tab], [Document without tab] or [Non-rectangular document].

Item	Description
Document with tab	Scans up to 20 mm off the bottom edge of the document with a tab.
Document without tab	Stops the scan when it detects the bottom edge of the document.
Non-rectangular document	Scans up to 120 mm off the bottom edge of the detected document. (Not available when connected via SCSI or USB Connector 2)

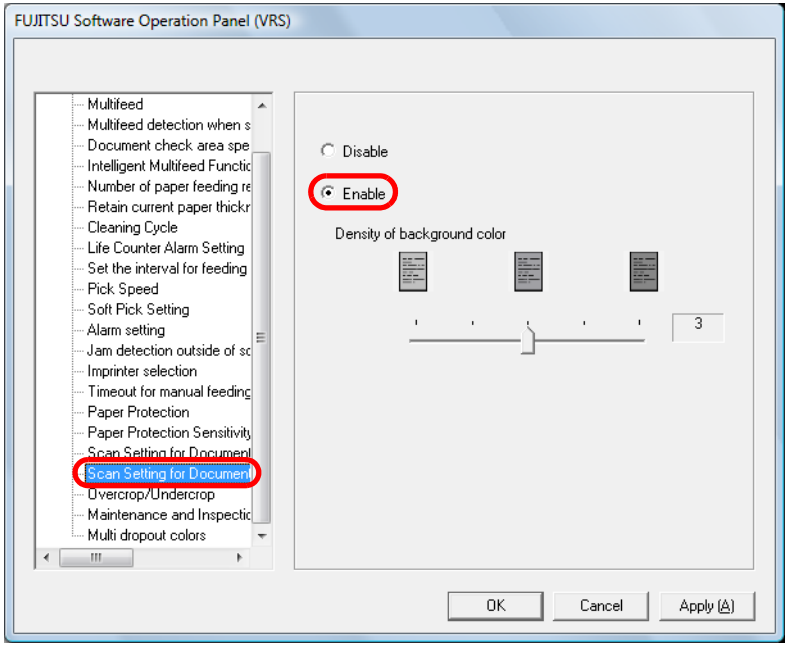
- The scanning speed slows down when you select [Document with tab] or [Non-rectangular document].
- To scan documents with tabs or non-rectangular documents, refer to "Loading Documents with Tabs or Non-rectangular Documents" (page 43).
- For information on how to configure Automatic Page Size Detection, refer to "Automatically Correcting Skewed Document Images" (page 100).
- When connected via SCSI or USB Connector 2, the tab may be missing from the scanned image when a document smaller than A5 size is scanned.

Scanning Documents with Dark Background Color [Scan Setting for Document in Dark Ground Color]

Configure this setting when the edges of a document with dark background color are not detected accurately. You can specify the level of sensitivity to accurately detect the edges of documents with dark backgrounds.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, click [Device Setting 2] → [Scan Setting for Document in Dark Ground Color], then select [Enable].



3 Specify the [Density of background color].

When you increase the [Density of background color], it may falsely detect the edges due to the dust inside the paper path.

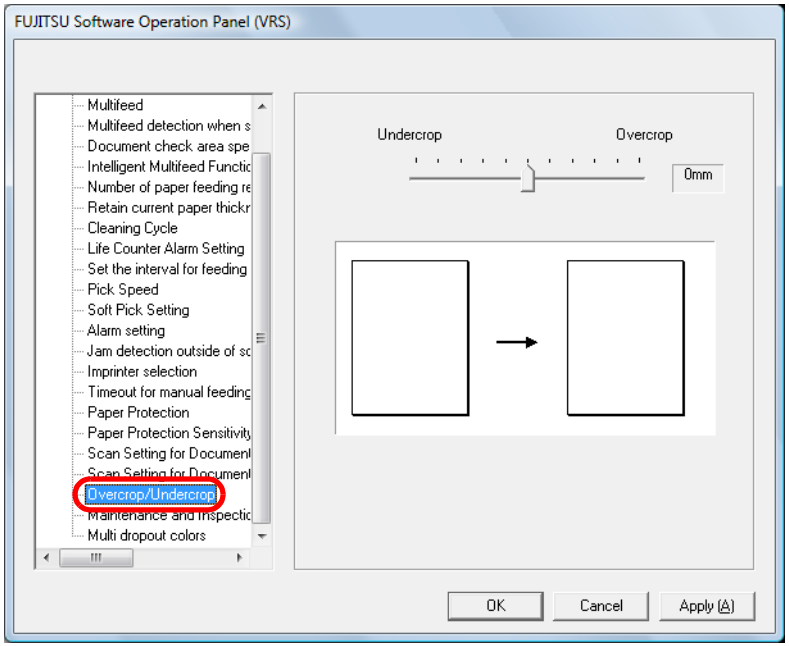
This setting appears ONLY when Kofax VRS is used.

Adjusting the Result of the Output Image [Overcrop/Undercrop]

You can adjust the output image result for documents detected in Automatic Page Size Detection.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, click [Device Setting 2] → [Overcrop/Undercrop].



3 Adjust the output result by using the slider bar.

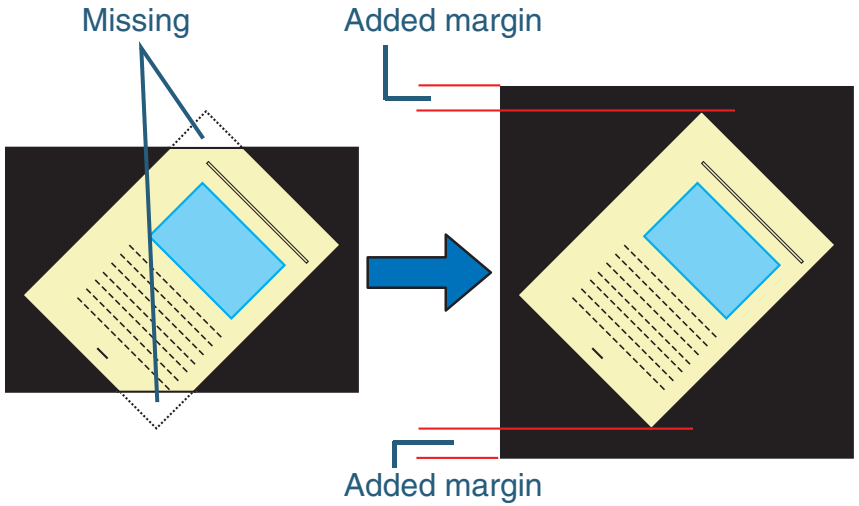
Item	Description
Overcrop	Adds black areas around the edges of the document so that it contains the whole image. Specify in the range of 0 to 5 mm (in increments of 1 mm).
Undercrop	Deletes the area around the edges of the document and leaves no black area. Specify in the range of -5 to 0 mm (in increments of 1 mm).

When you scan a wide document by Overcrop, it may not add the specified amount of black area around the document edge.

- Output result is not adjusted when the slide bar is set to 0 mm.
- This setting appears ONLY when Kofax VRS is used.

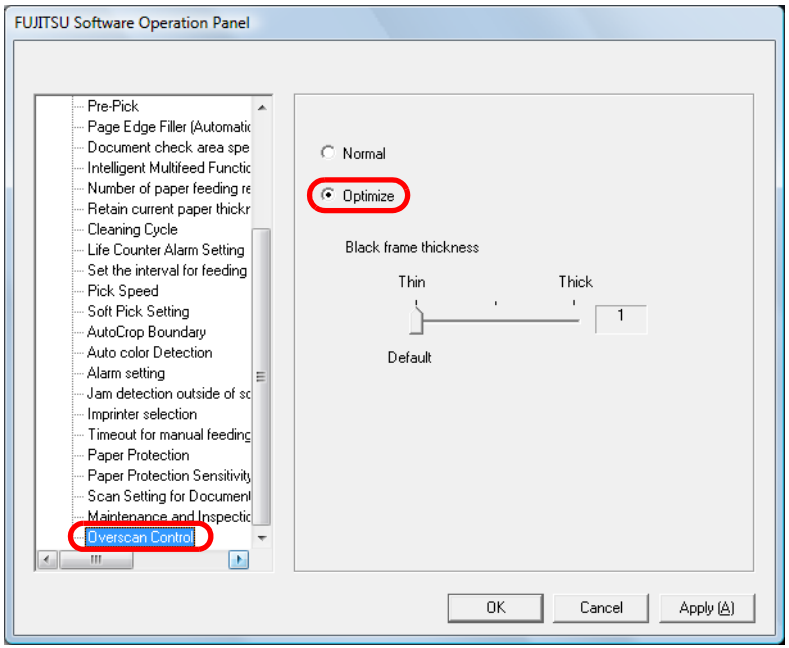
Adjusting the Output Result for Overscan [Overscan Control]

Specify [Optimize] when you use overscan and the image is partially missing due to a large skew.
When an abnormal image skew is detected, you can ensure that the whole image is contained by setting a sufficient amount of black margin on the top and the bottom.
Select [Thick] to increase the amount of black margin.



1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, click [Device Setting 2] → [Overscan Control], then select [Optimize].



3 Specify the amount of [Black frame thickness] for the top and bottom.

- This option is recommended to be used with [Set the interval for feeding sheets].
- It is recommended that you scan in the largest available paper size.
- This setting does NOT appear when Kofax VRS is used.

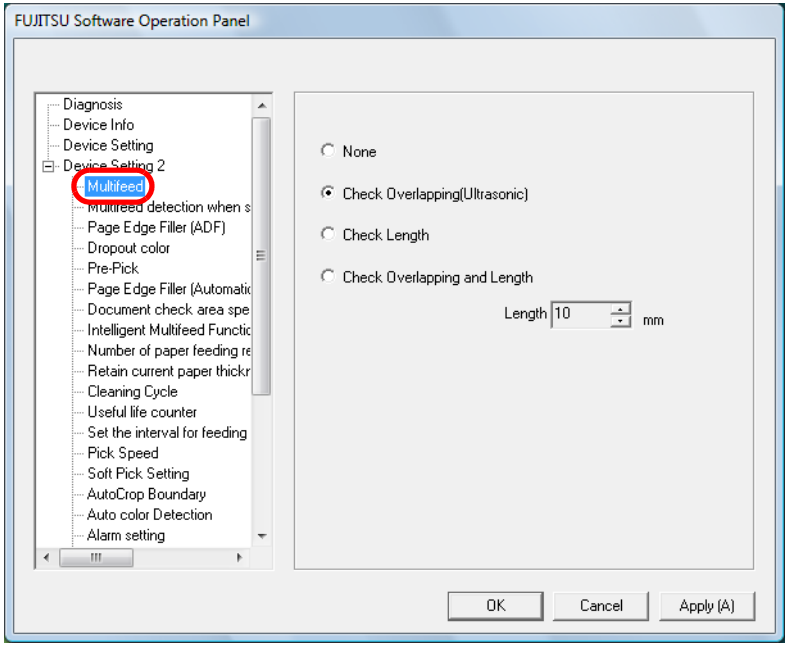
9.5 Settings Related to Multifeed Detection

Specifying a multifeed detection method [Multifeed]

Multifeed is an error when two or more sheets are fed through the ADF at once. It is also called a “multifeed” when a different document length is detected.
Not noticing multifeed errors while scanning may put you in a situation where important data are missing from the scanned images. Multifeed detection function is equipped to prevent such troubles.
When this function is enabled, an error message is displayed as soon as it detects a multifeed, and stops the scan.
Note that multifeeds cannot be detected in the area of 15 mm from the leading edge of the document.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, click [Device Setting 2] → [Multifeed].



3 Select a detection method.

Detection	Description
None	Does not detect multifeeds.
Check Overlapping (Ultrasonic)	Detects multifeed by the overlapping of documents. When this is selected, you can also specify the two following options: • Specify the detection range by the length from the leading edge of the document. Proceed to "Specifying the Area to Detect Multifeed [Document check area specification for Multifeed Detection]" (page 213) for more details. • Ignore the multifeed when there is paper of the same size attached to a designated location on the page. Proceed to "Bypassing Multifeed Detection for a Fixed Format" (page 117) for more details.
Check Length	Detects multifeed by the difference in length of the documents. Note that multifeed cannot be detected accurately when scanning a mixed batch (in different sizes) or a Job Separation Sheet.
Check Overlapping and Length	Detects multifeed by a combination of [Check Overlapping (Ultrasonic)] and [Check Length]. Note that multifeed cannot be detected accurately when scanning a mixed batch (in different sizes) or a Job Separation Sheet.
Length	Select a length difference from 10/15/20 mm. Any length under the specified length will not be detected as multifeed.

- To scan documents with different lengths, specify [Check Overlapping (Ultrasonic)].
- When a photo or a piece of paper is attached on the document, the overlapping part of the document may be falsely detected as multifeed if [Check Overlapping (Ultrasonic)] is specified. In this case, specify [Check Length].
  Note however that [Check Overlapping (Ultrasonic)] can still be used by restricting the detection range.

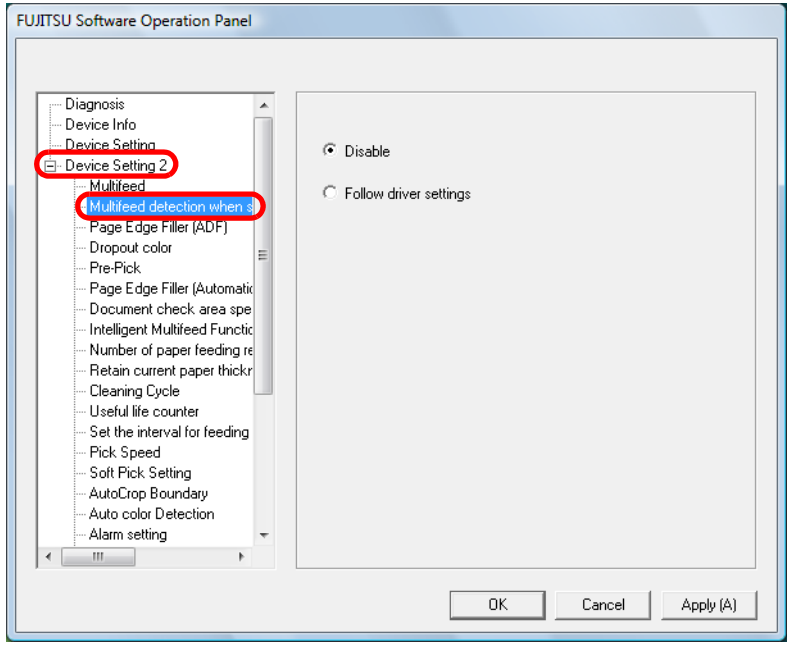
This setting can also be configured in the scanner driver's setup dialog box. Note that priority is given to the scanner driver setting.

Settings for Multifeed Detection in Manual Feeding [Multifeed detection when scanning in manual feeding mode]

Configure this setting when you want to enable multifeed detection for scanning in Manual Feed mode.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting 2] → [Multifeed detection when scanning in manual feeding mode].



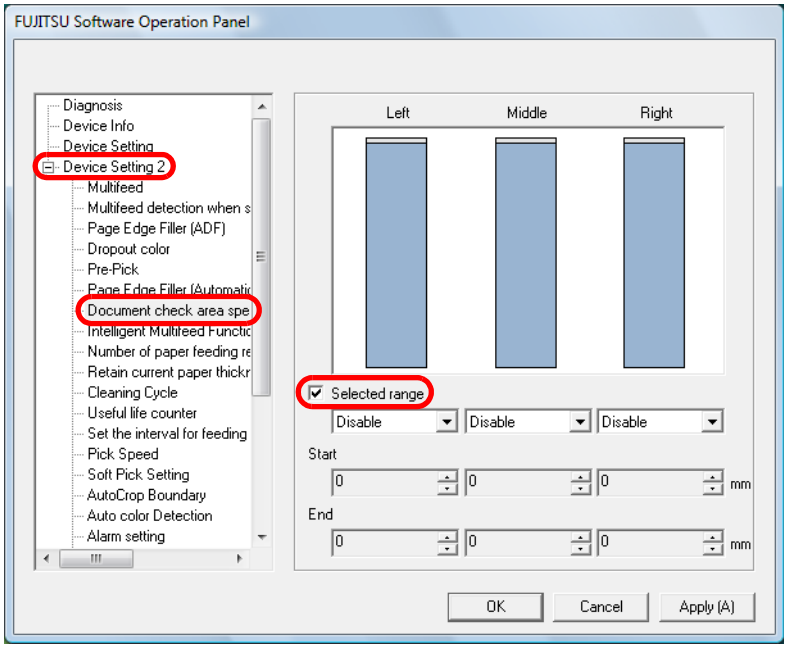
3 Select a detection method.

Detection	Description
Disable	Does not detect multifeeds.
Follow driver settings	Detects multifeeds if multifeed detection is enabled in the scanner driver settings. (Displays [Follow multifeed settings] when connected via SCSI or USB Connector 2.)

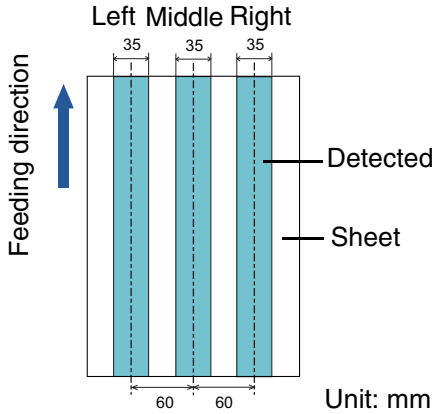
Specifying the Area to Detect Multifeed [Document check area specification for Multifeed Detection]

The following setting is only available when you specified [Check Overlapping (Ultrasonic)].

1 From the listing on the left, click [Device Setting 2] → [Document check area specification for Multifeed Detection].
Select the [Selected range] check box in the dialog box.



2 Specify the detection range.

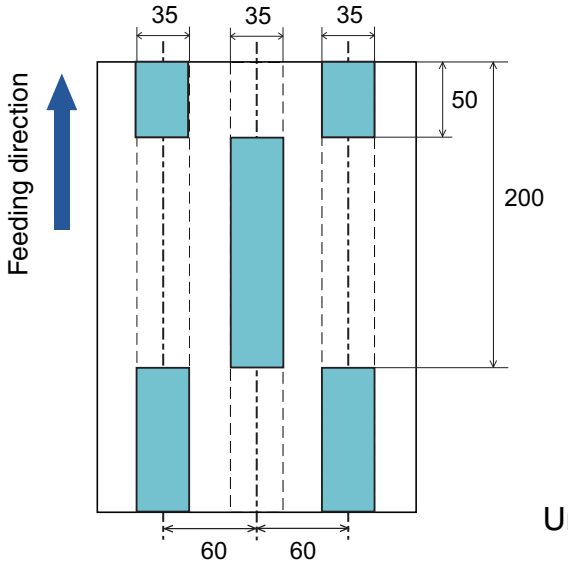
Range	Description
Selected range	Select the check box to specify the detection range (colored in light blue) in the picture below.  Select the check box to enable the setting in this window. Clear the check box to disable the setting. Clearing this check box sets both the start and the end positions to "0", making the whole document to be detected for multifeeds. The above condition applies when the document is set to the center of the pick roller width.
Disable (Left/Middle/Right)	Does not detect multifeeds for the selected area.
Enable (Left/Middle/Right)	Detects multifeeds for the selected area.
Start (Left/Middle/Right)	Displays the starting point of the detection by the length from the leading edge of the document. Configurable area: 0 to 510 mm (in increments of 2 mm), Start < End

Range	Description
End (Left/Middle/Right)	Displays the end point of the detection by the length from the leading edge of the document. Configurable area: 0 to 510 mm (in increments of 2 mm), Start < End

- When both [Start] and [End] are set to "0", multifeed detection is performed for the whole area regardless of whether it is enabled or disabled.
- To disable multifeed detection for the whole document, select [Disable] and set the start position to "0" and the end position to be equal to or longer than the document length.
- If the start position is set larger than the document length: with [Disable], the whole range covering the entire document length will be checked; with [Enable], the multifeed detection will be disabled.
- To detect multifeeds, the detection range must be at least 8 mm in length.
  Configure the settings so that the value of the end position minus the start position is 6 mm or more.
- You can also set the start and the end positions by one of the following ways:
  - Create a square or rectangle to indicate the detection range by dragging your mouse pointer on the displayed image in the dialog box.
  - Drag the handle for the detection range to change the start and end positions using the mouse pointer on the displayed image in the dialog box.

Example 1:

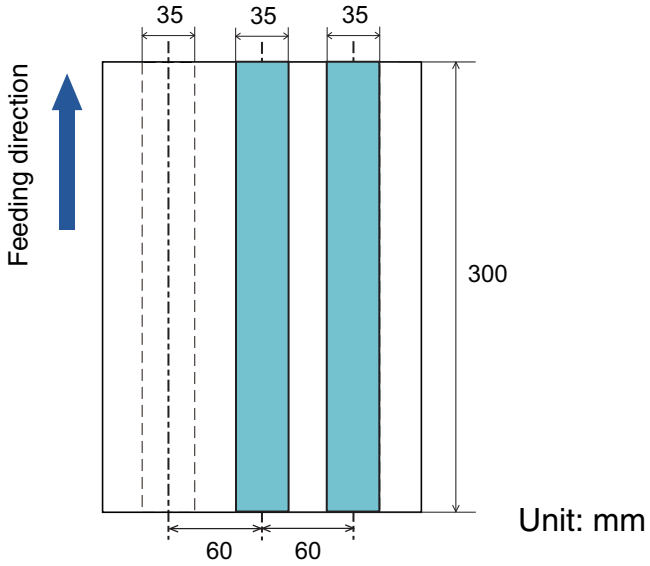
- Specified position: Left
  Selected range = Disable, Start = 50 mm, End = 200 mm
- Specified position: Middle
  Selected range = Enable, Start = 50 mm, End = 200 mm
- Specified position: Right
  Selected range = Disable, Start = 50 mm, End = 200 mm



Multifeed is detected only for the areas in light blue.

Example 2:

- Specified position: Left
  Selected range = Disable, Start = 0 mm, End = 300 mm or more
- Specified position: Middle
  Selected range = Enable, Start = 0 mm, End = 0 mm
- Specified position: Right
  Selected range = Disable, Start = 0 mm, End = 0 mm

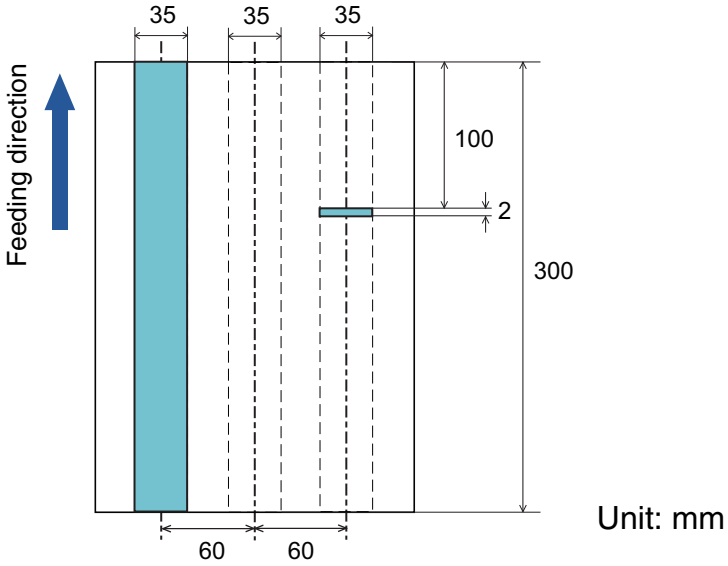


Multifeeds are detected only for the areas in light blue.

When detecting the overlapping of documents, the multifeed detection rate may drop if the documents are glued tightly or attached together by static electricity.

Example 3: (Bad example)

- Specified position: Left
  Selected range = Disable, Start = 310 mm, End = 400 mm
- Specified position: Middle
  Selected range = Enable, Start = 320 mm, End = 450 mm
- Specified position: Right
  Selected range = Enable, Start = 100 mm, End = 102 mm



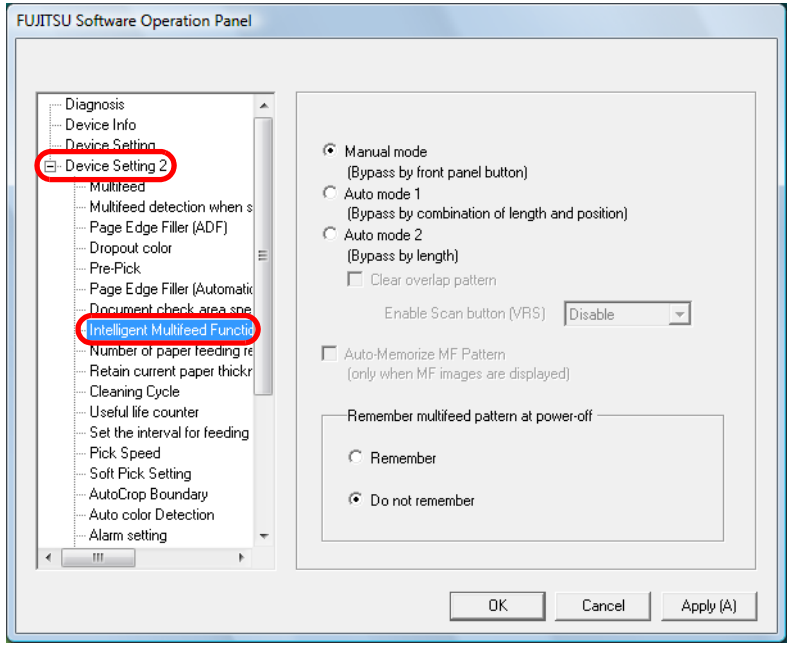
Since the detection range (length) is less than 8 mm, multifeeds cannot be detected correctly.

Specifying an Area Not to Detect Multifeed [Intelligent Multifeed Function]

When there is paper of the same size attached to a designated location on the page, the scanner can memorize the location of the attachment and can be configured not to detect multifeeds for that location. To configure this setting, you first need to select [Check Overlapping (Ultrasonic)] for the multifeed detection setting in "Specifying a multifeed detection method [Multifeed]" (page 210) or the scanner driver's setup dialog box.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, click [Device Setting 2] → [Intelligent Multifeed Function].



3 Select an operation mode and click the [OK] button.

Mode	Description
Manual mode	Stops feeding the documents when a multifeed is detected. You can resume scanning by loading the documents back on the hopper. The size and location of the paper attachment are not memorized.
Auto mode 1	Memorizes the size and location of the paper attachment upon resuming the scan when a multifeed is detected and the document is loaded back on the hopper. The memorized pattern is ignored from the next scan.
Auto mode 2	Memorizes the size of the paper attachment upon resuming the scan when a multifeed is detected and the document is loaded back on the hopper. The memorized pattern is ignored from the next scan.

- By selecting the [Clear overlap pattern] check box, you can erase the overlapping patterns (length, position) that were memorized in Auto mode.
- You can specify whether to enable or disable the [Scan] button when using Kofax VRS in [Enable Scan button (VRS)].
- By selecting the [Auto-Memorize MF Pattern (only when MF images are displayed)] check box, you can have the multifeed pattern memorized in the window that shows the multifed images.
- In [Remember multifeed pattern at power-off], you can select whether or not to memorize the multifeed pattern upon turning the power off. When [Remember] is selected, you can use the memorized multifeed pattern when the scanner is powered on next.
- This setting can also be configured from the operator panel.

For information about the procedure after this step, refer to "Bypassing Multifeed Detection for a Fixed Format" (page 117).

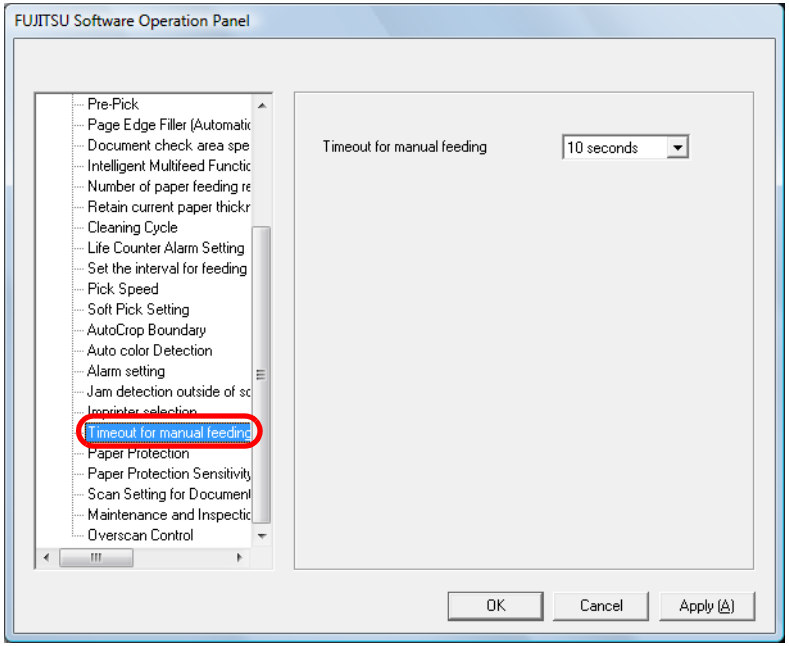
9.6 Settings Related to the Waiting Time

Setting the Waiting Time for Manual Feeding [Timeout for manual feeding]

When you scan by manually loading one sheet at a time (Manual feeding mode), you can specify the waiting time (interval) for feeding the next sheet, in which scanning can be continued.
When the specified time elapses, the scan is automatically stopped and manual feeding is canceled.
To cancel Manual Feeding mode immediately, press the [Counter Reset] button during the timeout period.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, click [Device Setting 2] → [Timeout for manual feeding].



3 Specify a value of the timeout for manual feeding.
To enable the timeout setting, select the timeout period for manual feeding until loading the next document after the previous one.

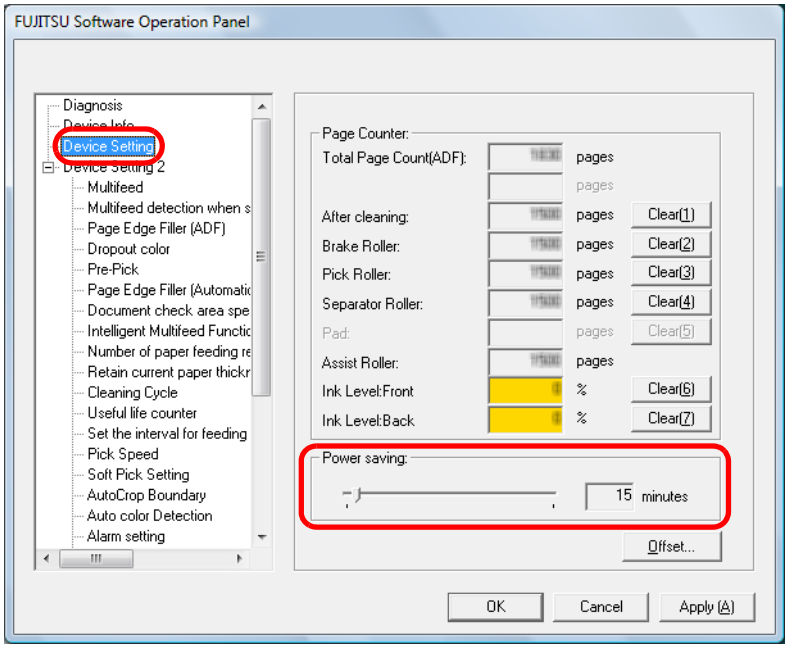
- The scanner waits for the period of manual feed timeout even if scanning starts with no document loaded on the hopper.
- This setting can also be configured from the operator panel.

Setting the Waiting Time to Enter Power Saving Mode [Power saving]

When the scanner is not being used for a certain period of time, it enters power saving mode to save the power consumption.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, select [Device Setting].



3 Use the slide bar to specify the waiting time to enter power saving mode.
It can be set in the range of 5 to 235 minutes (in increments of 5 minutes).

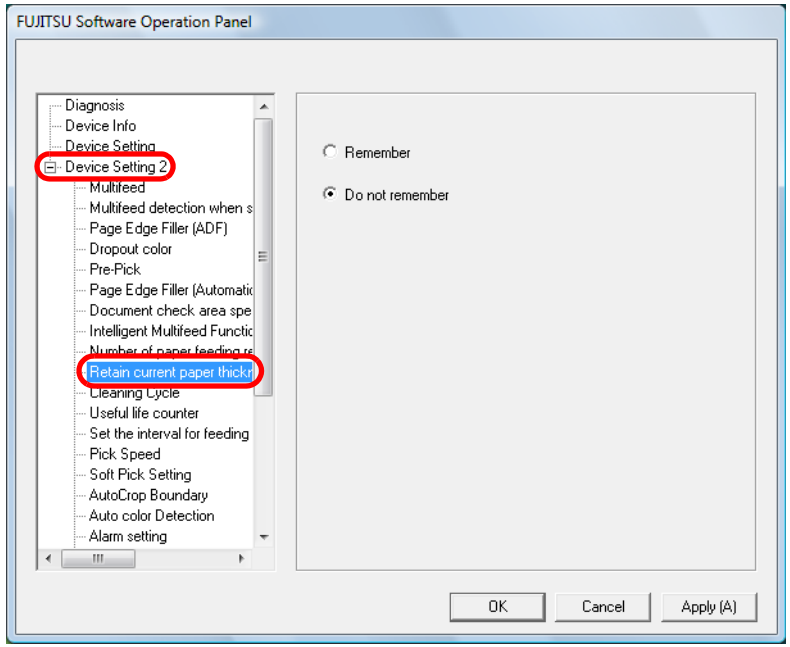
9.7 Settings Related to Power ON/OFF Control

Setting the Paper Separation Force upon Turning the Power Off [Retain current paper thickness]

Specify whether or not to memorize the paper separation force setting of the operator panel upon turning the power off.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, click [Device Setting 2] → [Retain current paper thickness].



3 Specify whether or not to memorize the paper separation force setting of the operator panel upon turning the power off.
When [Remember] is selected, you can use the memorized setting next time the scanner is powered on.

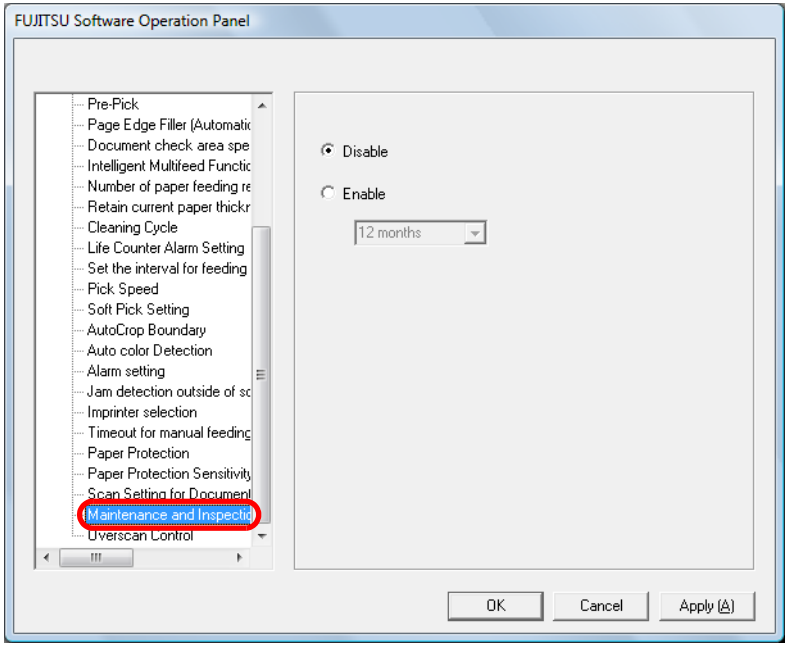
9.8 Settings Related to Maintenance/Options

Setting the Maintenance/Inspection Cycles for the Scanner [Maintenance and Inspection Cycle]

You can specify the cycle of regular maintenance/inspection by a service engineer.
A message for regular maintenance appears when the time specified here elapses after the last time regular maintenance/inspection was performed. Messages for regular maintenance can be checked in [Information] of the operator panel.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, click [Device Setting 2] → [Maintenance and Inspection Cycle].



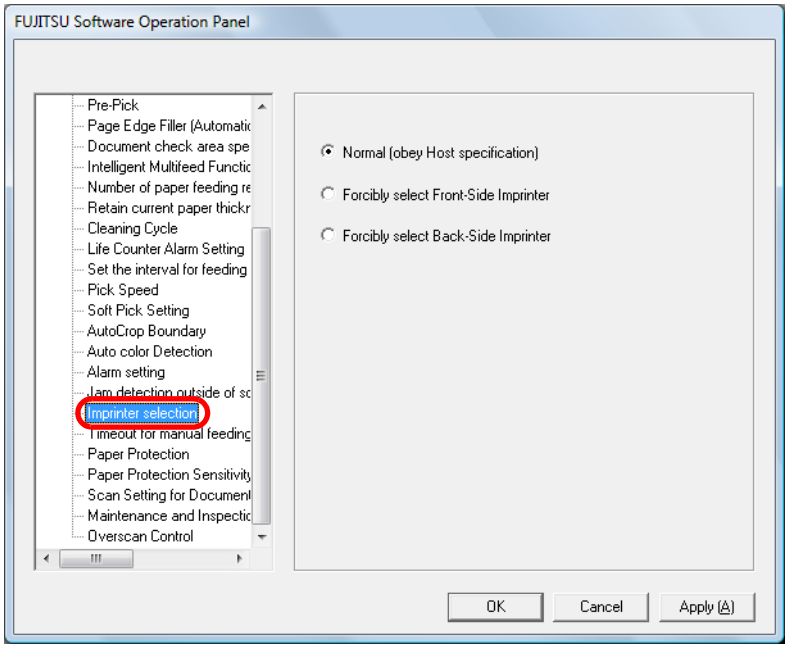
3 Select whether to enable or disable [Maintenance and Inspection Cycle].
When you enable this setting, select a cycle for maintenance/inspection by a service engineer.

Imprinter Settings [Imprinter selection]

Specify which imprinter to use when both Front-Side Imprinter and Back-Side Imprinter are installed.
This setting does not appear when no imprinter is installed.

1 Start up the Software Operation Panel.
Refer to "9.1 Starting Up the Software Operation Panel" (page 173).

2 From the listing on the left, click [Device Setting 2] → [Imprinter selection].



3 Select the Imprinter to use.

Normal (obey Host specification):	Follows the scanner driver setting.
Forcibly select Front-Side Imprinter:	Forces the Front-Side Imprinter to be used unless specified otherwise by the scanner driver.
Forcibly select Back-Side Imprinter:	Forces the Back-Side Imprinter to be used unless specified otherwise by the scanner driver.

- For information about the Imprinter, refer to "A.4 Scanner Options" (page 228).
- This setting can also be configured from the scanner driver's setup dialog box. Note that priority is given to the scanner driver setting.

Appendix

This section provides the following information:

A.1 Basic Specification 223
A.2 Installation Specification 225
A.3 Outer Dimensions 227
A.4 Scanner Options 228
A.5 Uninstalling the Software 229

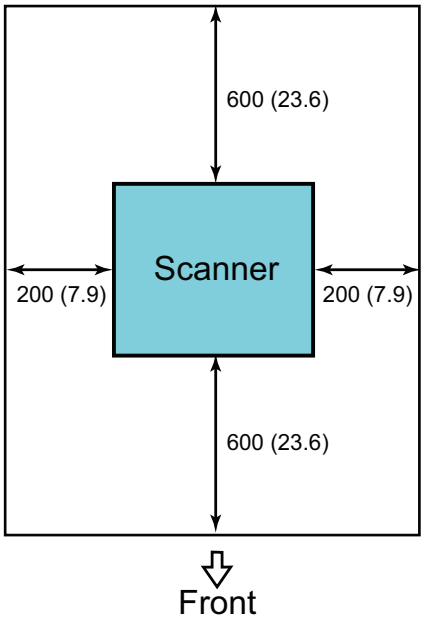
A.1 Basic Specification

Item		Specification	Notes
Scanner type		ADF (Automatic Document Feeder) and manual feed	-
Image sensor		Color CCD × 2 (front, back)	-
Light source		White LED array × 4 (front, back)	-
Scanning area	Minimum	52 × 74 (mm) / 2.05 × 2.91 (in.) (portrait)	-
	Maximum	304.8 × 431.8 (mm) / 12 × 17 (in.)	(*1)
Paper weight		A5 or larger, A4/Letter or smaller: 20 to 209.3 g/m^2 (5.5 to 56.1 lb) Smaller than A5, larger than A4/Letter: 40.7 to 209.3 g/m^2 (11.0 to 56.1 lb)	-
Scanning speed (A4, landscape)(*2)	Binary (black & white)	Simplex: 130 sheets/min Duplex: 260 pages/min	200 dpi / 300 dpi
	Grayscale		
	Color		
Document Loading Capacity (*3)		500 sheets	Paper weight: 80 g/m^2 (20 lb) Total thickness: 50 mm or less Total weight: 5 kg or less * When hopper level is set to [Lower]
Optical resolution		600 dpi	-
Output resolution	Binary (black & white)	50 to 600 dpi	Configurable by 1 dpi
	Grayscale	50 to 600 dpi	Configurable by 1 dpi
	Color	50 to 600 dpi	Configurable by 1 dpi
Grayscale level		8 bits for each color	10 bits/color during internal processing

Item	Specification		Notes
Halftone pattern	Dither/error diffusion		-
Interface (*4)(*5)	Ultra SCSI		Shielded 50-pin high-density type
	USB 2.0 / 1.1 (*6)		B Type
	Kofax VRS	Ultra Wide SCSI	Shielded 68-pin high-density type
		USB 2.0 / 1.1 (*6)	B Type
Liquid Crystal Display	Display: FSTN (black & white) Displayed dots: 110 × 65 Displayed lines: 16 × 5 (row x column)		-
Other function	Hardware real-time JPEG compression		Grayscale/color

*1: Long Page Scanning supports scanning of documents with a length up to 3048 mm (120 in.) in feeding direction.
For documents longer than 864 mm (34.02 in.), the resolution must be set to 300 dpi or less.
*2: The maximum hardware limitation. Software processing time such as data transfer time is added to the actual scanning time.
*3: The maximum capacity varies depending on the paper weight. See "2.2 Documents for Scanning" (page 40).
*4: SCSI and USB 2.0/1.1 interfaces cannot be used at the same time.
*5: You cannot connect multiple computers to the scanner using each type of interface cables at the same time.
*6: Connection via USB 2.0 requires the USB port and the hub to support USB 2.0. Also note that the scanning speed slows down when using USB 1.1.

A.2 Installation Specification

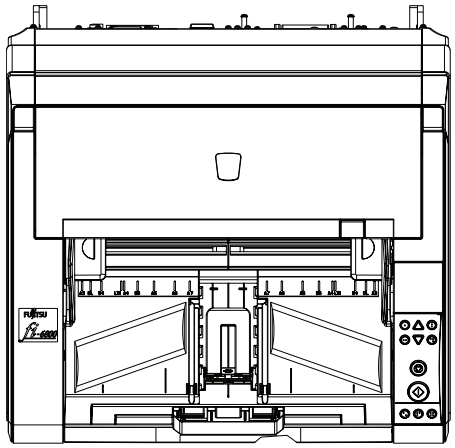
Item		Specification
Outer dimensions (Width × Depth × Height)(*1)		460 × 430 × 310 (mm) / 18.1 × 16.9 × 12.2 (in.)
Installation space		 Unit: mm (in.)
Weight		32 kg (70.5 lb)
Input power	Voltage range	100 to 240 Vac ±10%
	Phase	Single phase
	Frequency range	50/60 ±3 Hz

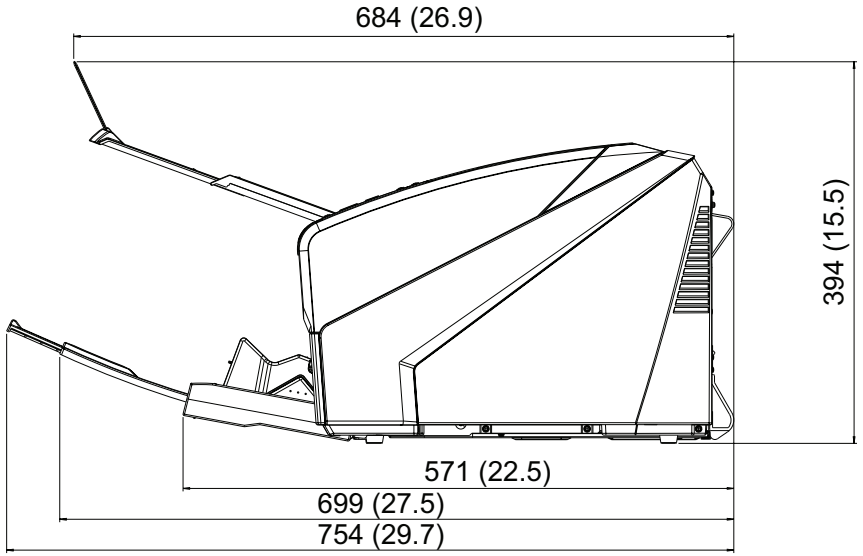
Item		Specification
Power consumption	Operating	200 W or less
	Power Saving	SCSI or USB Connector 1: 4.0 W or less (100 to 120 Vac) 4.2 W or less (220 to 240 Vac) SCSI or USB Connector 2: 5.3 W or less (100 to 120 Vac) 5.6 W or less (220 to 240 Vac)
Ambient condition	Temperature	Operating: 15 to 35˚C (41 to 95˚F) Not operating: -20 to 60˚C (-4 to 140˚F)
	Humidity	Operating: 20 to 80% Not operating: 8 to 95%
Calorific value	Operating	216 kcal/Hr or less
	Power Saving	SCSI or USB Connector 1: 3.5 kcal/Hr or less (100 to 120 Vac) 3.7 kcal/Hr or less (220 to 240 Vac) SCSI or USB Connector 2: 4.6 kcal/Hr or less (100 to 120 Vac) 4.9 kcal/Hr or less (220 to 240 Vac)
Shipping weight (*2)		39 kg (86.0 lb)

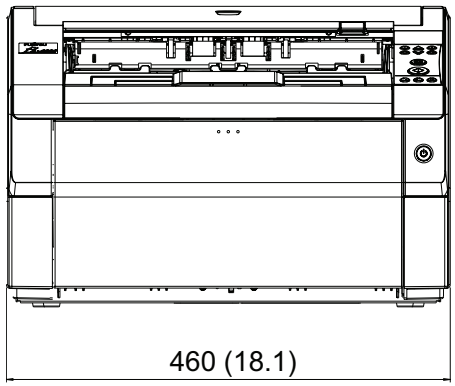
*1: The depth excludes the hopper and the stacker.
*2: Includes the package weight.

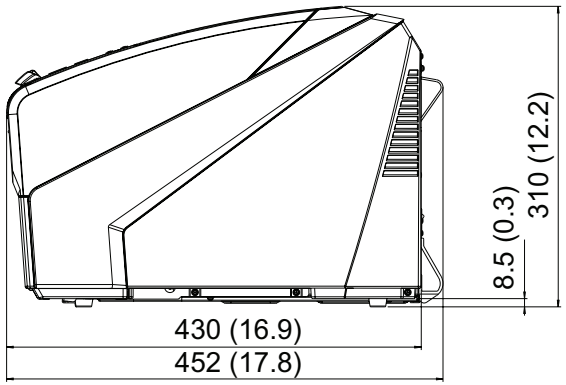
A.3 Outer Dimensions

The outer dimensions are as follows:









Unit: mm (in.)

A.4 Scanner Options

Product Name	Model	P/N	Description
fi-680PRF	FI-680PRF	PA03575-D201	An imprinter option for the front side. Prints alphanumeric character strings on the scanned document. You can use this imprinter to manage documents by printing the user name, date, and serial number. For more details about fi-680PRF (Front-Side Imprinter), refer to the “fi-680PRF/PRB Operator's Guide”.
fi-680PRB	FI-680PRB	PA03575-D203	An imprinter option for the back side. Prints alphanumeric character strings on the scanned document. You can use this imprinter to manage documents by printing the user name, date, and serial number. For more details about fi-680PRB (Back-Side Imprinter), refer to the “fi-680PRF/PRB Operator's Guide”.

For more information, contact your FUJITSU scanner dealer or an authorized FUJITSU scanner service provider.

fi-680PRF and fi-680PRB can be installed on this scanner together. However, you cannot use both imprinters at the same time. Make sure to specify one imprinter at a time.

A.5 Uninstalling the Software

1 Start up your computer.

> Log on as a user with Administrator privileges.

2 Close all running applications.

3 Select the [Start] menu → [Control Panel] → [Programs and Features].

⇨ The [Uninstall or change a program] window is displayed where you can view a list of installed applications.

> Displays may vary depending on the operating system you are using. Follow the instructions of your operating system.
> For Windows 2000:
> - [Programs and Features]
> ⇨ [Add/Remove Applications]
> - [Uninstall] or [Uninstall/Change] button → [Add/Remove] button
>
> For Windows XP:
> - [Programs and Features]
> ⇨ [Change or Remove Programs]
> - [Uninstall] or [Uninstall/Change] button → [Change/Remove] button

4 Click on the application to remove.

- To remove TWAIN:
  Click [Scanner Utility for Microsoft Windows].
- To remove ScandAll PRO:
  Click [Fujitsu ScandAll PRO].
  After ScandAll PRO, you can also remove Scan to Microsoft SharePoint.
- To remove Scan to Microsoft SharePoint:
  Click [Scan to Microsoft SharePoint].
- To remove ISIS:
  Click [ISIS Driver Bundle Installer for fi Series scanners].
- To remove the Error Recovery Guide:
  Click [Error Recovery Guide for fi-6800].
- To remove the Software Operation Panel:
  Click [Software Operation Panel]
  (Software Operation Panel is installed together with TWAIN/ISIS).
- To remove Kofax VRS:
  Click [Kofax VRS].
- To remove the operating manuals:
  Click [fi-Scanner manuals fi-6800].
- To remove Quick Scan Pro™:
  Click [Quick Scan].
- Scanner Central Admin Agent:
  Uninstall by referring to the Scanner Central Admin 4.0 User's Guide.
- To remove Adobe Acrobat:
  Click [Adobe Acrobat Standard].

> Refer to the "Image Processing Software Option User's Guide" to uninstall the Image Processing Software Option (Demo version).

5 Click the [Uninstall] button or the [Uninstall/Change] button.

6 If a confirmation dialog box appears, click [OK] or [Yes].

⇨ The program is removed.

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Numbers

11 × 17 in

A

A4 size
A standard paper size. Paper size is 210 × 297 mm.

A5 size
A standard paper size. Paper size is 148 × 210 mm.

A6 size
A standard paper size. Paper size is 105 × 148 mm.

A7 size
A standard paper size. Paper size is 74 × 105 mm.

A8 size
A standard paper size. Paper size is 52 × 74 mm.

ADF (Automatic Document Feeder)
A paper feeding mechanism which allows multiple sheets of documents to be scanned one sheet at a time.

Assist roller
A roller that feeds the document through the ADF. “Assist roller” refers to the first roller in the feeding direction.

Automatic size/skew detection
Automatic Skew Detection:
A function that detects skewed documents and outputs the image data in the correct angle.

Automatic Page Size Detection:
A function that detects the document’s paper size and outputs the image data in the same size.

End of Page Detection
Detects the end of the page and scans the length of the document.

B

Blank Page Skip
A function that detects and automatically deletes blank pages (white or black pages) within a batch of documents.

Brake roller
A roller that prevents multiple sheets of documents from being fed simultaneously into the ADF.

Brightness
Refers to the brightness of a scanned image.

C

Canadian DOC Regulations
"A standard issued by Industry Canada, a department of the Canadian government, which sets out the technical requirements relative to the radiated and conducted radio noise emissions from digital apparatus."

CCD (Charge-Coupled Device) Image Sensor
A sensor which perceives the light reflected from the document and converts it into digital (electronic) form. CCD technology is the basis of high-quality image acquisition in scanners, cameras, and other specialized devices.

Color balance
Balance of colors in an image.

D

Default setting
(Hardware)
Pre-set values from the factory.

(Software)
Values set upon installation of software.

Density
Refers to the darkness of a color in an image.

Device error
An error that requires a service engineer to recover from.

Dither
The process by which a group of dots is arranged to reproduce the density of grayscale. Grayscale density is reproduced by configuring preset dot patterns. This method requires less memory compared to multilevel gray.

dpi
Acronym for “dots per inch”. A measurement of resolution which is normally used for scanners and printers. Higher dpi indicates better resolution.

Driver software
In this manual, driver software refers to software that allows the scanning application software to communicate with the scanner.

Dropout color
Removes the specified color(s) from the scanned image.

Duplex scanning mode
A mode for scanning both sides of the document at once. (⇔Simplex scanning mode)

E

Edge Extract
A function which traces the boundaries between black and white areas, and extracts them as outlines.

Edge Processing
A function which decreases the density of bright colors (except for white) around black areas. Increasing the value for this function removes dotted image noise and also produces “softened” images.

Energy Star

ENERGY STAR is an international standard for energy-efficient electronic equipment which was established by the US Environmental Protection Agency (EPA) in 1992. The standard program has now been adopted by countries around the world.

Error diffusion

High-quality halftone (pseudo-grayscale) image processing based on black-and-white pixel binarization. A pixel's optical density and that of adjacent pixels are summed, with black pixels relocated in their order of density as they relate to adjacent pixels. The purpose of this technique is to minimize the average error between scanned and printed densities. Density data for adjacent pixels is modified by diffusing errors on the objective pixel into several pixels, which are then binarized. This maintains high grayscale levels and resolution during scanning, while suppressing more patterns by dotted halftone images such as newspaper photographs.

F

FCC

Acronym for "The Federal Communications Commission", an independent United States government agency which is in charge of regulating interstate and international communications via radio, television, wire, satellite and cable. The Part 15 of the FCC regulations mentioned in this manual is designed to prevent harmful interferences on radio communication of radio receivers and other devices which radiate radio frequency energy, and provides for the certification of radio receivers. It also provides the certification of low power transmitters and the operation of certificated transmitters without a license.

Feed roller

Rollers that feed documents through the ADF.

Filter

Refers to the following types of processing on scanned images.

Digital Endorser:
Adds character strings such as alphabets and numbers to the scanned image data.

Page Edge Filler:
Fills in the margin area around the scanned image with a specified color.

G

Gamma
A unit which indicates the changes in the brightness of an image. It is expressed as a function of the electric input power to devices (e.g. scanner, display) and the brightness of the image. If the gamma rate is larger than 1, the brightness of an image increases and vice versa. Normally, the gamma rate is set to 1 when reproducing the same brightness as the original.

Grayscale
A method which expresses the gradation (density) from black to white in 256 levels. Suitable for scanning images such as photographs.

H

Halftone processing
Reproduces the color density in black & white by using dot patterns. This method is effective for scanning images such as photographs in black & white.

I

Image processing
Refers to processing and outputting the scanned image via specified scan parameters.

iMFF (Intelligent MultiFeed Function)
A function that excludes certain patterns of overlapping of documents that is detected as multifeed, by letting the scanner memorize the overlap pattern. For instance, when there is paper of the same size attached to a designated location on the page, the scanner memorizes the location of the attachment and can be configured not to detect multifeeds for that location.

Imprinter
A printer that prints character strings such as alphabets and numbers on the front or the back of the document. It can be used to manage scanned images by adding names, date or serial numbers.

Interface
The connection that allows communication between the computer and the scanner.

Inversion
A scanning method in which the black part and the white part of the image are inverted.

ISIS
ISIS (Image Scanner Interface Specification) is an API (Application Program Interface) standard for imaging devices (e.g. scanners, digital cameras) which was developed by Captiva, a division of EMC Corporation (the former Pixel Translations) in 1990. In order to use imaging devices designed for ISIS standard, it is necessary to install a driver software that supports ISIS.

J

Job Separator
A sheet inserted between documents in a batch for separating different jobs. Job separator types are as follows:

Job separator with Patch Codes:
A sheet with Patch codes printed.

Job separator with barcodes:
A sheet with barcode(s) printed.

Job separator by hardware (Job Separation Sheet):
A special sheet with a 20 mm x 15 mm rectangle notch in the center of the leading edge.

L

Landscape
Orientation in which the short side of the document is set parallel to the feeding direction.

Letter size
A standard paper size used in the United States and other countries. Paper size is 8.5 × 11 inches.

M

Moire patterns
Recurrent patterns on scanned images caused by incorrect settings of angles.

Multifeed
Multifeed is an error when two or more sheets are fed through the ADF at once. It is also called a “multifeed” when a different document length is detected.

Multi Image
A function which outputs the image in both color/grayscale and black & white at once.

N

Noise removal
Isolated noise from an image appearing as black spots in white areas and voids in black areas is removed to improve image quality. Common noise includes toner and fax particles. Noise reduction works via an algorithm that removes pixels up to 5 x 5 dots apart. A dot is 1/400 inch. A particle can be distinguished from a character as it is not connected to another dot within 5 pixels.

O

OCR (Optical Character Recognition)
A device or a technology that recognizes the text on documents and converts them into text data that can be edited. The shape of the characters are recognized by the differences in the light reflected off the documents.

Operational environment
Conditions (e.g. temperature, humidity) required to operate or store the scanner correctly.

Operator panel
A panel that consists of LCD and buttons. It is used for scanner operations such as selecting functions and changing the settings.

Optical sensor
A sensor which detects the changes in the amount of light transmission. Paper feeding errors such as multifeed and paper jam are detected by monitoring the passing of documents.

Overcrop
Refers to cropping the scanned image in a size larger than the document in Automatic Page Size Detection. Overcrop is used to ensure that the whole image is contained and not partially missing.

Overscan
A function that scans the document in a size larger than the specified paper size.

P

Paper jam
Refers to a state in which a document is jammed inside the paper path or feeding is interrupted by documents slipping.

Paper Protection
A function that stops the scan when the scanner detects a document that is highly deformed.

Patch code
A special code to let the scanner recognize the start and the end of each job or image mode.

Pick roller
A set of rollers that pick the sheets into the ADF.

Pick start time
The period of time between setting the document and until picking starts after the document passes the hopper empty sensor.

Pinch roller
Driven rollers that are located on the opposite sides of the Feed(/Assist) rollers to feed documents through the ADF.

Pixel
The dots that make up a scanned image.

Portrait
Orientation in which the long side of the document is set parallel to the feeding direction. Documents/images are set/displayed vertically.

Pre-pick
Refers to feeding the document in advance to the position to start scanning. It shortens the interval between setting the document and feeding the document to the starting position.

R

Resolution
A measurement to indicate the quality (fineness) of an image. Resolution is displayed by the number of pixels within an inch. Since image data is a collection of small dots (pixels), if the same image contains different amounts of pixels, the one with more pixels can express greater details. Therefore the higher the resolution, the finer the image becomes.

S

SCSI
SCSI (Small Computer System Interface) is a standard for interfaces, used to connect devices such as hard disks and scanners. Up to seven devices can be connected by this interface (daisy chain). The data transfer rate is 10 MB/sec. at maximum for Fast SCSI, and 20 MB/sec. at maximum for Wide SCSI.

SCSI-ID
Used to specify a particular SCSI device when the initiator selects a target or the target reconnects to the initiator.

SEE (Selectable Edge Enhancement)
A function that scans line drawings and photographs by halftone processing to emphasize the lines and text on the document. This mode is most suitable when you want to emphasize only the text of a document that contains both text and photographs.

Separator roller
A roller that separates one sheet from the batch of documents on the hopper and pulls the sheet into the ADF.

Shortcut key
A function that enables frequently used key operations by a simple key sequence.
Used to perform key sequences on the operator panel by a simple combination of button sequence.

Simplex scanning mode
A mode for scanning only one side (front or back) of the document. (⇔Duplex scanning mode)

Smoothing
Refers to the removal of irregularities on diagonal lines and curves, which is a processing method commonly used in OCR applications.

Soft Pick
A function to reduce the number of sheets pulled by the pick roller at once by restricting the up and down movement of the pick roller during feeding.

T

Temporary error
An error that can be fixed by the user (operator).

Threshold
The value which is used to determine whether a certain color is black or white. Threshold value must be configured in order to scan images with grayscale gradation. Each pixel is converted into black or white according to the specified value.

TÜV
An institution that controls products for conformity with various standards related to security, usability and environmental issues.

TWAIN (Technology Without Any Interesting Name)
An API (Application Program Interface) standard for imaging devices (e.g. scanners, digital cameras) developed by TWAIN Working Group. In order to use devices that comply with this standard, it is necessary to install driver software that supports TWAIN standard.

U

Ultrasonic sensor
A sensor that detects multifeed errors by ultrasonic wave. It detects multifeeds by monitoring the difference in the amount of ultrasonic waves transmitted through the documents.

Undercrop
Refers to cropping the scanned image in a size small than the document in Automatic Page Size Detection. Undercrop is used to remove excess data (borders) around the image which is generated in the process of cropping.

USB
USB (Universal Serial Bus) is a standard for interfaces used to connect devices such as keyboards and scanners. Up to 127 devices can be connected by this interface. USB devices can be connected/disconnected without powering off the devices.
For USB 2.0, the data transfer rate is; 1.5 Mbps in Low-Speed, 12 Mbps in Full-Speed, and a maximum of 480 Mbps in Hi-Speed mode.
For USB 1.1, the data transfer rate is; 1.5 Mbps in Low-Speed, and a maximum of 12 Mbps in Full-Speed mode.

W

White Level Follower
A function to correct the difference between white colors in unbleached paper (e.g. wood containing paper) and in scanned images.

White Reference Stripe
The white part located in the ADF that defines the lightest area in an image, causing all other areas to be adjusted accordingly.

Z

Zone OCR
A function which performs text recognition on the specified area of the scanned image.

Numbers

11 × 17 in

A standard paper size used in the U.S.A. and other countries. Paper size is 11 × 17 inches.

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fi-6800 Image Scanner

Operator's Guide

P3PC-2492-03ENZ0

Issue date: October 2011

Issued by: PFU LIMITED

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